

# Press Release



[www.shire.com](http://www.shire.com)

## 2013 Annual Report – DTR 6.3.5 Disclosure

**March 27, 2014** - Shire plc (LSE: SHP, NASDAQ: SHPG) (the “Company”) announces that the following documents have today been posted or otherwise made available to shareholders:

- 2013 Annual Report
- Notice of the 2014 Annual General Meeting
- Form of Proxy

In accordance with Listing Rule 9.6.1, a copy of each of these documents has been uploaded to the National Storage Mechanism and will be available for viewing shortly.

The 2013 Annual Report and Notice of the 2014 Annual General Meeting are also available on Shire’s website [www.shire.com](http://www.shire.com).

Disclosure & Transparency Rule (“DTR”) 6.3.5 requires the Company to disclose to the media certain information from its Annual Report, if that information is of a type that would be required to be disseminated in a half-yearly report. Accordingly, the Appendix to this announcement contains a management report and the Directors’ responsibility statement. It should be read in conjunction with the Company’s unaudited full year results for the year ended December 31, 2013, issued on February 13, 2014, which comprises the Company’s consolidated financial statements prepared under US GAAP. The Appendix together with the unaudited full year results constitute the material required by DTR 6.3.5 to be communicated to the media in unedited full text through a Regulatory Information Service. This material is not a substitute for reading the full 2013 Annual Report.

The information included in the Appendix is extracted from the 2013 Annual Report which was approved by the Directors on February 24, 2014. Defined terms used in the Appendix refer to terms as defined in the 2013 Annual Report unless the context otherwise requires.

Tony Guthrie  
Deputy Company Secretary

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#### Notes to editors

Shire enables people with life-altering conditions to lead better lives.

Our strategy is to focus on developing and marketing innovative specialty medicines to meet significant unmet patient needs.

We provide treatments in Neuroscience, Rare Diseases, Gastrointestinal and Internal Medicine and we are developing treatments for symptomatic conditions treated by specialist physicians in other targeted therapeutic areas.

[www.shire.com](http://www.shire.com)

## **FORWARD - LOOKING STATEMENTS - "SAFE HARBOR" STATEMENT UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995**

Statements included in this release that are not historical facts are forward-looking statements. Forward-looking statements involve a number of risks and uncertainties and are subject to change at any time. In the event such risks or uncertainties materialize, Shire's results could be materially adversely affected. The risks and uncertainties include, but are not limited to, that:

- Shire's products may not be a commercial success;
- revenues from ADDERALL XR are subject to generic erosion and revenues from INTUNIV will become subject to generic competition starting in December 2014;
- the failure to obtain and maintain reimbursement, or an adequate level of reimbursement, by third-party payors in a timely manner for Shire's products may impact future revenues, financial condition and results of operations;
- Shire conducts its own manufacturing operations for certain of its Rare Diseases products and is reliant on third party contractors to manufacture other products and to provide goods and services. Some of Shire's products or ingredients are only available from a single approved source for manufacture. Any disruption to the supply chain for any of Shire's products may result in Shire being unable to continue marketing or developing a product or may result in Shire being unable to do so on a commercially viable basis for some period of time;
- the development, approval and manufacturing of Shire's products is subject to extensive oversight by various regulatory agencies and regulatory approvals or interventions associated with changes to manufacturing sites, ingredients or manufacturing processes could lead to significant delays, increase in operating costs, lost product sales, an interruption of research activities or the delay of new product launches;
- the actions of certain customers could affect Shire's ability to sell or market products profitably. Fluctuations in buying or distribution patterns by such customers can adversely impact Shire's revenues, financial conditions or results of operations;
- investigations or enforcement action by regulatory authorities or law enforcement agencies relating to Shire's activities in the highly regulated markets in which it operates may result in the distraction of senior management, significant legal costs and the payment of substantial compensation or fines;
- adverse outcomes in legal matters and other disputes, including Shire's ability to enforce and defend patents and other intellectual property rights required for its business, could have a material adverse effect on Shire's revenues, financial condition or results of operations;
- Shire faces intense competition for highly qualified personnel from other companies, academic institutions, government entities and other organizations. Shire is undergoing a corporate reorganization and the consequent uncertainty could adversely impact Shire's ability to attract and/or retain the highly skilled personnel needed for Shire to meet its strategic objectives;
- failure to achieve Shire's strategic objectives with respect to the acquisition of ViroPharma Incorporated may adversely affect Shire's financial condition and results of operations;

and other risks and uncertainties detailed from time to time in Shire's filings with the US Securities and Exchange Commission, including those risks outlined on pages 27 to 34 of the Appendix to this announcement.

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## **1. Chairman's review**

If you look at the track record of Shire over the past 25 years you will see a theme of change as the Company has adapted to anticipate and meet patient needs and maximize growth opportunities. From acquiring new businesses, to expanding overseas, from developing new treatments, to reorganizing our Company – change has always been part of Shire, and 2013 was a standout year in this respect. But at the core of all this change is an enduring commitment to meet the needs of patients with a range of specialized conditions. This has always been at Shire's heart and we are determined to continue making the most of this strength for all our stakeholders.

### **Changing for the better**

For us, 2013 was a year of further success. Our new Chief Executive Dr. Flemming Ornskov led a major reorganization, re-focusing our Company on our core strengths and on where we need to be to continue to grow and succeed in the future. Flemming has a rare combination of science, medical, business and commercial acumen and his impact on Shire has been immediate and significant. We have reset Shire to create a simpler, more streamlined and effective organization – One Shire - entirely focused on developing and marketing innovative specialty medicines to meet significant unmet patient needs. Making big changes quickly is inevitably challenging, but the ones we have made through 2013 are making our Company stronger and better positioned to drive a new era of growth ahead as a result.

We face the future fit and lean, more focused and flexible and we remain as motivated as ever to make the most of a world where medical science is getting more sophisticated, treatments are becoming more specialized and better-informed patients are demanding access to new and better treatments.

### **Continuing to specialize**

Specializing has served us well over the years, particularly so in a pharmaceuticals industry which is not only more competitive but also more geared towards highly differentiated and effective treatments, and often very niche scientific developments. Going forward, Shire will continue to look for specialist areas where there is high unmet medical need.

### **Identifying and developing assets**

One of our greatest strengths has been our ability to identify assets that address very specific patient needs, and to develop and bring these assets to market. These products and product candidates are typically either already approved and marketed or we assess them as having a high probability of being approved. Our skill is finding those assets to deliver growth and knowing how to maximize their commercial potential.

Over the years, we have established ourselves as an active dealmaker. Our most recent acquisition, of ViroPharma, Inc. ("ViroPharma"), is an excellent strategic fit and we are confident in our ability to maximize value for shareholders and, of course, for patients. The acquisition is expected to enhance Shire's revenue and, earnings growth profile going forward.

### **Expanding internationally**

We continue to focus on expanding our international presence. We have developed a robust international strategy through the commercialization of our Rare Diseases treatments which are now sold in over 50 countries in addition to the continued launch of ELVANSE in Europe. We have succeeded in scaling up steadily while building valuable understanding along the way of how to gain approval and market the same products in many different countries. We continue to expand, particularly into Asia. In 2013, we announced the establishment of a subsidiary office in Japan, the second largest pharmaceutical market in the world. We also established a presence in China and in South Korea.

### **Doing the right things**

I am pleased with the composition of our Board. We have a good multi-national mix of skills and experience drawn from different areas including the worlds of pharmaceuticals, science, finance and banking. The atmosphere is open, participative and constructively challenging. Together, we focus on ensuring that Shire does the right things and does things right – strategically and responsibly.

We welcomed Dominic Blakemore to the Board of Directors on January 1, 2014. Dominic is a non-executive Director and member of the Audit, Compliance & Risk Committee. He brings a wealth of experience and fresh perspective to the Board.

## 1. Chairman's review

### **Making the most of specialty**

Looking ahead, we see even more growth potential in and around focusing on specialized unmet needs. With ever more finely-focused scientific developments and highly-targeted therapies for rare diseases, we aim to find new opportunities to lead the way in our core space. Specialized, high-value, targeted medicine is the future for Shire - we will continue to develop and market innovative treatments for distinct patient populations with specialized and often quite rare conditions around the world.

I'd like to thank all Shire employees for their immense efforts and unwavering commitment to meeting the needs of our patients and creating value for our shareholders during another successful year.

After more than ten years at Shire, at the Annual General Meeting on April 29, 2014, I will hand over the Chairmanship to Susan Kilsby. Having worked with Susan on the Board for a number of years I believe she is the ideal Chairman for the Company going forward; she has excellent commercial experience and will be a great new leader for the next era of Shire's growth. I have thoroughly enjoyed my time with Shire as it has developed and grown and I am confident that its track record of success will continue.

### **Matthew Emmens**

Chairman

## **2. Chief Executive Officer's review**

### **Delivering strong results**

In 2013, we refined and strengthened our strategy and created a simpler, more streamlined, integrated organization – One Shire. We also established our In-line and Pipeline committees to further reinforce our focus on commercial excellence and innovation. This enabled us to significantly reset our cost base and accelerate our growth.

In my first year as Chief Executive I am pleased to say that Shire has made considerable progress, achieving a great deal.

### **Resetting our strategy**

The first accomplishment was to reset our strategy – honing in on certain high growth areas within specialty medicine. We are focusing even more than before on rare, specialized conditions, building on our strengths and on where there is the greatest potential to grow and make a real difference to patients' lives. Our priorities are to drive optimum performance from our currently marketed In-line products for patients today, and to build our Pipeline of potential products for patients in the future through focused R&D and business development.

### **Reorganizing to form One Shire**

To better support this strategic focus, we reorganized the Company to form a simpler, more cohesive and streamlined organization - One Shire. Instead of three separate divisions, we now have four business units, focused exclusively on the commercial execution of our In-line products in our specialist therapeutic areas: Rare Diseases, Neuroscience, Gastrointestinal (GI) and Internal Medicine.

Our single R&D organization focuses on developing our pipeline of innovative treatments to address unmet patient needs. And we have one global business development team that searches for value-added therapeutics that fit our strategic focus.

The reorganization of Shire is well advanced, with some final internal systems and processes to be concluded over 2014. We will, however, always seek to adopt new approaches and structures in the pursuit of continuous improvement and delivery of growth.

### **Changing the way we manage the Company**

We also changed the way we manage the business – reconstituting the Executive Committee (formerly known as the Leadership Team) as well as establishing two new management committees – the In-line Committee and the Pipeline Committee. The Executive Committee manages the business of the Shire group. The In-line Committee is responsible for ensuring the optimal performance of our current portfolio of marketed products. The Pipeline Committee is responsible for overseeing and driving the development of our pipeline of future products. As a result, we have been better able to enhance sales and address performance of our In-line products and also consider our Pipeline investments and business development strategy on a Shire-wide basis.

### **Reducing costs**

Significant cost savings are coming from our much simpler, more streamlined, integrated organization. This has enabled us to direct our investment into the areas that we believe will provide growth for the Company in the future.

### **Delivering efficient growth**

Additionally, we have been able to streamline decision making, so we can make faster decisions with a more acute focus on customers. In our Neuroscience business unit for example, we have restructured and reinvested in our sales force in the US to help provide better service to physicians.

As a result of strong product sales growth and reducing costs our bottom line profitability has improved, reflecting our focus on delivering efficient growth.

### **Focusing our innovation**

We have restructured our R&D organization into one innovation-driven team. In our early stage research we have committed to focus on rare diseases, where there is significant unmet need and where we have strong expertise. Our current pipeline has a very promising range of late stage assets and we will seek to add to these through business development. By aligning our efforts and investments on fewer areas with greater

## 2. Chief Executive Officer's review

potential we aim to be more efficient and effective in developing our portfolio of distinctive and innovative products in our chosen areas of specialization.

### **Acquiring great new assets**

We announced four acquisitions in 2013 to further strengthen our Pipeline and In-line portfolio. These all fit our growth strategy by adding to our strength in specialized or Rare Diseases.

With Lotus Tissue Repair, Premacure and SARcode Biosciences, we have exciting new assets in areas of unmet patient need, with significant growth opportunities.

Lotus Tissue Repair, Inc. ("Lotus Tissue Repair") is developing the first and currently only protein replacement therapy for the treatment of DEB, a devastating orphan disease for which there is no currently approved treatment option other than palliative care. The product is in late preclinical development and has the potential to be a first-in-class systemic therapy for the treatment of DEB.

The Premacure AB ("Premacure") acquisition brought us a Phase 2 protein replacement therapy for the prevention of ROP. A rare and potentially blinding eye disorder that primarily affects premature babies, ROP is one of the most common causes of visual loss in childhood and there are only symptomatic treatments available.

Our move into ophthalmology was enhanced by the acquisition of SARcode Bioscience, Inc. ("SARcode"). SARcode brought us Lifitegrast (SHP606) in Phase 3 development for the treatment of Dry Eye disease, a chronic and potentially debilitating ocular disease. The worldwide market for Dry Eye disease was worth \$1.5 billion<sup>1</sup> in 2012 and is growing. We announced top-line data from a Phase 3 clinical trial and were pleased to meet the primary symptom endpoint, although the primary sign endpoint was not met. This is the first drug to show a statistically significant improvement in the prespecified symptoms of Dry Eye disease in a Phase 3 clinical trial. We will be discussing these findings with the Food and Drug Administration ("FDA") and hope in due course to be able to make Lifitegrast available to patients with this potentially debilitating condition.

Towards the end of the year, we announced a significant strategic acquisition of the high growth, rare disease biopharmaceutical company ViroPharma for approximately \$4.2 billion.

The acquisition brought us a new growth-driving product, CINRYZE, used for the prophylactic treatment for Hereditary Angiodema (HAE), complementing Shire's FIRAZYR, which is used for the treatment of acute HAE attacks. The acquisition also brought us other In-line and Pipeline assets. In addition to enhancing both Shire's immediate and long term growth prospects, the acquisition is also expected to bring significant cost synergies.

### **Making the most of existing assets**

As well as focusing on finding and acquiring great new assets and opportunities for Shire, we also work hard to make the most of our existing assets, whether by taking them into new countries or by exploring and developing new uses for them. Take for example lisdexamfetamine dimesylate ("LDX"), as the active ingredient in VYVANSE, our treatment for ADHD in the US. We are exploring the very real potential for LDX to form the basis of treatment for Binge Eating Disorder (BED). Estimates suggest there are around three million patients with BED in the US. This is a huge unmet need with no currently approved pharmacologic treatment. Positive results in Phase 3 BED trials in 2013 underline the great potential of this new use for LDX. We are currently discussing the next steps with the FDA.

In line with our strategy to prioritize investments that have the greatest strategic clinical and commercial value, in January 2014 we sold our DERMAGRAFT assets to Organogenesis, Inc. Despite great efforts, we could not generate the growth in sales that we expected from this product. As a result of this transaction, we are now able to concentrate our investment and resources on products and pipeline programs that have better profitability and growth prospects.

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<sup>1</sup> SOURCE: Team analysis; evaluate pharma

## **2. Chief Executive Officer's review**

### **Continuing to change**

If you look at the history of Shire over the past 25 years, we have always been a fast growing, adaptive company. Shire continues to evolve, never stands still and we strive to surprise, positively. This ability to embrace and incorporate change is key to our success. It is in our DNA.

### **Putting patients at the heart of our business**

A core aspect of Shire is our very real focus on patients. Like change, it has always been part of what makes us special. When we try to be great in a specialized area, the first thing we look at is the patient. Are there significant unmet patient needs? Do we truly understand these patients? Do we have the product or potential product to meet their needs? Putting patients at the heart of our business has always been our guiding principle. It is why there are pictures of patients around our offices everywhere and it is reinforced by our enduring culture of striving to be as brave as the patients we serve. Our BRAVE culture is integral to the way we attract and retain great people. It keeps the Company fresh and engaged. And it plays a major part in our people's remarkable ability to continue to deliver results while also focusing on changing for the future.

### **Our people**

I would like to take this opportunity to thank everyone in Shire for their tremendous contribution this year and for their amazing willingness to embrace change for the better.

After almost six years at Shire, Graham Hetherington is stepping down as Chief Financial Officer (CFO) on March 1, 2014. We are grateful for Graham's many contributions to the Company and wish him all the best. Shire's Senior Vice President and Group Financial Controller James Bowling will be interim CFO and we are undertaking the global search for Graham's successor.

### **Evolving the business**

This year we have undergone another evolution in Shire. We have increased our focus on developing and marketing innovative specialty medicines to meet significant unmet patient needs and we have simplified and streamlined to reset our cost base and accelerate our growth.

We now have a sharper, stronger Shire – a Shire that is well set for high growth both in the top and bottom line. In the years ahead we will focus on even more specialty, even more rare diseases, even more targeted conditions where we can lead the way in developing and delivering treatments for patients.

Investors have responded well to the changes and we were pleased with the steady and significant increase in Shire's share price during 2013. We are grateful to our shareholders for their continued support as we continue to do everything we can to build the success and grow the value of Shire.

### **Focusing on growth**

Where 2013 was essentially a year of evolution, we expect that 2014 will above all be a year of growth. We now have a sharper focus and a stronger more streamlined organization together with our BRAVE culture and unswerving commitment to patients with specialized conditions.

Boosted by this firm foundation, we will focus on growth - through our existing In-line products, through our Pipeline of potential products and through identifying and maximizing all the opportunities that lie ahead. I look forward to another exciting year for Shire.

**Dr. Flemming Ornskov**  
Chief Executive Officer

### 3. Financial Review

#### Overview

Shire is a leading specialty biopharmaceutical company that focuses on developing and marketing innovative specialty medicines that address significant unmet patient needs. The Company has grown through acquisition, completing a series of major transactions that have brought therapeutic, geographic and pipeline growth and diversification. The Company will continue to evaluate companies, products and pipeline opportunities that offer a good strategic fit and have the potential to deliver demonstrable value to all of the Company's stakeholders: patients, physicians, policy makers, payors, investors and employees.

The Company's vision is to transform the lives of people around the world whose health is impacted by rare and other specialized conditions, through providing innovative treatments. The Company will execute on its vision through its strategy and business model. For further details of Shire's strategy and business model, refer to page 18 of Shire's 2013 Annual report.

Through deep understanding of patients' needs, the Company is able to:

- serve patients with high unmet needs in select, commercially attractive specialty therapeutic areas;
- drive optimum performance of its marketed products – to serve patients today;
- build its pipeline of innovative specialist treatments through both R&D and Business Development activities – to enable the Company to serve patients in the future.

Shire's in-licensing and acquisition efforts are focused on products in specialist markets with strong intellectual property protection or other forms of market exclusivity and global rights. Shire believes that a carefully selected and balanced portfolio of products with strategically aligned and relatively small-scale sales forces will deliver strong results.

Substantially all of the Company's revenues, expenditures and net assets are attributable to the R&D, manufacture, sale and distribution of pharmaceutical products within one reportable segment. The Company also earns royalties (where Shire has out-licensed products to third parties) which are recorded as revenues.

Revenues are derived primarily from two sources - sales of the Company's own products and royalties:

- 96% (2012: 94%) of total revenues are derived from product sales; and
- 3% of total revenues are derived from royalties (2012: 5%).

The markets in which the Company conducts its business are highly competitive and highly regulated.

There is increasing legislation both in the US and the rest of the world which is placing downward pressure on the net pricing of pharmaceutical products and medical devices. For example the US government passed healthcare reform legislation in 2010 which included an increase in Medicaid rebate rates and extended Medicaid rebates to those products provided through Medicaid managed care organizations. The legislation also imposed excise fees to be paid by both pharmaceutical manufacturers (from 2011) and medical device companies (from 2013). The CMS are also increasingly bundling drug reimbursement into procedure costs, which can severely decrease the reimbursement rates to physicians for some manufacturers' drugs, biologicals and medical devices. The impact of these recent changes to US healthcare legislation, and other healthcare reforms in the rest of the world, has not to date had a material impact on the Company's results of operations.

The healthcare industry is also experiencing:

- pressure from governments and health care providers to keep prices low while increasing access to drugs;
- increasing challenges from third party payors for products to have demonstrable clinical benefit, with pricing and reimbursement approval becoming increasingly linked to a product's clinical effectiveness and impact on overall costs of patient care;
- increased R&D costs, because development programs are typically larger and take longer to get approval from regulators;
- challenges to existing patents from generic manufacturers;
- governments and healthcare systems favoring earlier entry of low cost generic drugs; and
- higher marketing costs, due to increased competition for market share.

### 3. Financial Review

Shire's strategy has been developed to address these industry-wide competitive pressures. This strategy has resulted in a series of initiatives in the following areas:

#### *Markets*

Shire's current portfolio of approved products focuses on the following markets: Rare Diseases, Neuroscience and Gastrointestinal ("GI") diseases. Shire also has a number of marketed products for other therapeutic areas from which it generates product revenues or royalties from third parties. In 2013 Shire derived 41% of product sales from Neuroscience products, 33% from Rare Diseases products, 17% from GI products and 9% from products addressing other therapeutic areas. Shire's early stage research is focused on rare diseases.

Shire has grown through acquisition which has brought therapeutic, geographic and pipeline growth and diversification. For example the recent acquisitions of Ferrokin Biosciences Inc ("Ferrokin") in 2012 and Lotus Tissue Repair, Premacure and SARcode in 2013 provide potential access to new markets such as ophthalmology, neonatology and hematology/oncology. The acquisition of ViroPharma, which closed in January 2014, expands Shire's Rare Diseases portfolio including adding CINRYZE, a leading currently marketed product for the prophylactic treatment of HAE.

In 2013 Shire derived 30% of product sales from outside of the US. Shire has ongoing commercialization and late-stage development activities, which are expected to further supplement the diversification of revenues in the future, including the following:

- filing in 2013 of an application in Japan for the approval of VPRIV for the treatment of Gaucher disease;
- filing in 2013 of an application in Japan for the approval of XAGRID for the treatment of elevated platelet counts in at risk essential thrombocythemia patients; and
- INTUNIV Phase 3 clinical program to support submission of an MAA in the EU.

#### *R&D*

The Company reorganized its R&D efforts in 2013, combining the R&D organizations of its former divisions into a single One Shire R&D organization focused around a prioritized portfolio of development and research programs. Shire has focused its R&D efforts on five therapeutic areas; Rare diseases, Neuroscience, GI, Hematology and Ophthalmology. Shire concentrates its resources on obtaining regulatory approval for later-stage pipeline products within these therapeutic areas and focuses its early stage research activities primarily in rare diseases.

Evidence of the successful progression of the late stage pipeline can be seen in the granting of approval and associated launches of the Company's products over the last five years. In this time several products have received regulatory approval including: in the US, INTUNIV in 2009, VPRIV in 2010, and FIRAZYR in 2011; in the EU, VPRIV in 2010 and ELVANSE/TYVENSE in 2012; in Canada, VYVANSE in 2010.

Prior to the One Shire R&D reorganization, the Company's management reviewed R&D expenditure by operating segment. Following the One Shire R&D reorganization, Shire's management reviews direct costs for R&D projects by development phase.

### 3. Financial Review

Shire's R&D costs in 2013 included expenditure on programs in all stages of development. The following table provides an analysis of the Company's direct R&D spend categorized by development stage, based upon the development stage of each program as at December 31, 2013:

<b>Year to December 31, 2013</b>	<b>\$'M</b>
Early stage programs	102
Late stage programs	327
Currently marketed products	179
Total	608

In addition to the above, the Company recorded R&D employee costs of \$282 million in 2013 and other indirect R&D costs (comprising depreciation and impairment charges) of \$43 million.

#### *Patents and market exclusivity*

The loss or expiration of patent protection or regulatory exclusivity with respect to any of the Company's major products could have a material adverse effect on the Company's revenues, financial condition and results of operations, as generic or biosimilar products may enter the market. Companies selling generic products often do not need to complete extensive clinical studies when they seek registration of a generic or biosimilar product and accordingly, they are generally able to sell generic versions of the Company's products at a much lower price.

As expected, in 2009 Teva and Impax commenced commercial shipments of their authorized generic versions of ADDERALL XR, which led to lower sales of branded ADDERALL XR compared to the period prior to the authorized generic launch.

In 2011, authorized generic and generic versions of the Company's CARBATROL and REMINYL products respectively were launched, which led to lower sales of these branded products compared to the period before loss of exclusivity.

Shire is engaged in various legal proceedings with generic manufacturers with respect to its VYVANSE, LIALDA and ADDERALL XR patents. For more detail of current patent litigation, see Note 19 to the consolidated financial statements.

#### *Business Development*

Shire seeks to focus its business development activity on the acquisition and in-licensing of products and compounds which offer a good strategic fit and have the potential to deliver demonstrable value to all of the Company's stakeholders.

#### *Recent mergers or acquisitions*

On January 24, 2014 Shire completed the acquisition of ViroPharma which added a marketed product for the prophylactic treatment of HAE, CINRYZE, as well as a number of other marketed products and a pipeline of product candidates in the rare disease area.

In 2013, Shire acquired:

- SARcode which added SHP606 to the Shire portfolio (SHP606 is currently in Phase 3 development for the treatment of Dry Eye disease).
- Premacure which added SHP607 to the Shire portfolio (SHP607 is currently in Phase 3 for the prevention of ROP).

### 3. Financial Review

- Lotus Tissue Repair which added global rights to a protein replacement therapy in pre-clinical development, for the treatment of DEB.

In 2012, Shire acquired:

- FerroKin which added SHP602 to the Shire portfolio (SHP602 is in Phase 2 for the treatment of iron overload following numerous blood transfusions).
- Substantially all the assets and certain liabilities of Pervasis Therapeutics Inc., which added VASCUGEL (now SHP613) to the Shire portfolio (SHP613 is in Phase 2 development for acute vascular repair).

#### *Collaboration and licensing activity*

Shire has also entered into a number of collaboration and license agreements in recent years, including:

- A collaboration and license agreement with Sangamo to develop therapeutics for hemophilia and other monogenic diseases based on Sangamo's ZFP technology in 2012;
- A worldwide exclusive license from IGAN Biosciences, Inc. ("IGAN") to develop and commercialize protease-based therapeutics for the treatment of IgA nephropathy, a rare kidney disease in 2012; and
- Shionogi co-development and co-commercialization agreement in 2012 for VYVANSE and INTUNIV in Japan.

#### *Organization and Structure*

On May 2, 2013, the Company announced that there would be a reorganization of the Company's business to integrate its Specialty Pharmaceuticals ("SP"), Human Genetic Therapies ("HGT") and Regenerative Medicine ("RM") business units and reportable segments into a simplified One Shire organization in order to drive future growth and innovation. Consequently the SP, HGT and RM segments no longer exist. Shire now comprises a single operating and reportable segment. For further details see Note 25 "Segment reporting" to the consolidated financial statements.

On November 7, 2013, the Company announced that, as part of the One Shire reorganization, the Company had undertaken a review of all of Shire's pipeline programs to identify those projects that fit with Shire's new strategic direction and have an acceptable likelihood of success. Shire's pre-clinical investments will now be primarily focused on rare diseases, meaning that the majority of other pre-clinical projects will not continue. Several clinical programs have also been discontinued.

The impact of the prioritization and rationalization of the Company's development portfolio means many of the R&D programs currently run from Basingstoke, UK will cease. Taken together with the overall streamlining of the R&D organization, this has resulted in a significant number of R&D roles in Basingstoke being eliminated and some positions being re-located. A small number of functional roles that support R&D in Basingstoke have also been affected.

In addition the Company announced plans to re-locate its international commercial hub from Nyon, Switzerland to Zug, Switzerland. All Nyon-based employees have been impacted by the One Shire transition and the move to Zug. Shire is planning for the new Zug office to be ready for occupancy in summer 2014, and will phase out the Nyon office over a reasonable period of time to enable employees and their families to manage their re-locations.

On October 22, 2013 Shire announced that it had decided to discontinue the construction of its new manufacturing facility in San Diego. On January 16, 2014, the Company sold and transferred certain of the assets relating to the manufacturing, marketing, sale and distribution of DERMAGRAFT to Organogenesis Inc. For further information, see Note 9, "Results of discontinued operations and assets held for sale" to the consolidated financial statements).

On January 23, 2013 Shire announced that it had decided to proceed with a collective dismissal and business closure at its site in Turnhout, Belgium. This decision followed the conclusion of an information and consultation process. Shire continues to sell RESOLOR in Europe and the supply of RESOLOR for patients in Europe who rely on the medicine will not be affected. The closure of the Turnhout site was completed during 2013.

### 3. Financial Review

#### Results of operations for the year to December 31, 2013

Financial highlights for the year to December 31, 2013 are as follows:

Product sales from continuing operations in 2013 were up 12% to \$4,757 million (2012: \$4,253 million).

The strong growth in product sales from continuing operations was driven by VYVANSE (up 19% to \$1,228 million), LIALDA/MEZAVANT (up 32% to \$529 million), VPRIV (up 12% to \$343 million), INTUNIV (up 16% to \$335 million) and FIRAZYR (up 102% to \$235 million).

Total revenues from continuing operations were up 9% to \$4,934 million (2012: \$4,527 million) as the growth in product sales was partially offset, as expected, by lower royalties and other revenues (down 36%).

Operating income from continuing operations in 2013 was up 66% to \$1,734 million (2012: \$1,045 million), primarily due to the strong growth in product sales and an overall reduction in total operating expenses in 2013 compared to 2012 as the Company focuses on delivering efficient growth. Operating expenses in 2013 include a net credit of \$159 million due to change in the fair value of contingent consideration liabilities, in particular relating to the acquisition of SARcode following the release of top-line Opus-2. Operating expenses in 2012 include impairment charges of \$197.9 million in 2012 related to RESOLOR intangible assets. Research and Development expenditure decreased by 2%. SG&A expenditure decreased by 15%.

Diluted earnings per Ordinary Share from continuing operations increased 74% to \$2.45 (2012: \$1.41) due to the higher operating income from continuing operations and a lower effective tax rate of 16% (2012: 20%).

#### Total revenues

The following table provides an analysis of the Company's total revenues by source:

Year to December 31,	2013	2012	Change
	\$'M	\$'M	%
Product sales	4,757.5	4,252.9	+12%
Royalties	153.7	241.6	-36%
Other revenues	23.1	32.9	-30%
Total	4,934.3	4,527.4	+9%

### 3. Financial Review

#### Product sales

	Year to December 31, 2013 \$'M	Year to December 31, 2012 \$'M	Product sales growth %	Non-GAAP CER growth <sup>4</sup> %	US prescription growth <sup>1</sup> %	Exit market share <sup>1</sup> %
Net product sales:						
VYVANSE	1,227.8	1,029.8	+19	+19	+6	16
ELAPRASE	545.6	497.6	+10	+11	n/a <sup>3</sup>	n/a <sup>3</sup>
LIALDA/MEZAVANT	528.9	399.9	+32	+32	+18	28
REPLAGAL	467.9	497.5	-6	-4	n/a <sup>3</sup>	n/a <sup>3</sup>
ADDERALL XR	375.4	429.0	-12	-12	-9	5
VPRIV	342.7	306.6	+12	+12	n/a <sup>2</sup>	n/a <sup>2</sup>
INTUNIV	334.9	287.8	+16	+16	+8	5
PENTASA	280.6	265.8	+6	+6	-1	14
FIRAZYR	234.8	116.3	+102	+101	n/a <sup>2</sup>	n/a <sup>2</sup>
FOSRENOL	183.4	172.0	+7	+6	-18	4 <sup>3</sup>
XAGRID	99.4	97.2	+2	+1		n/a <sup>2</sup>
Other product sales	136.1	153.4	+8	+11	n/a	n/a
<b>Total product sales</b>	<b>4,757.5</b>	<b>4,252.9</b>	<b>+12</b>			

(1) Data provided by IMS Health National Prescription Audit ("IMS NPA"). Exit market share represents the average US market share in the month ended December 31, 2013.

(2) IMS NPA Data not available.

(3) Not sold in the US in the year to December 31, 2013.

(4) The Company's management analyzes product sales and revenue growth for certain products sold in markets outside of the US on a constant exchange rate ("CER") basis, so that product sales and revenue growth can be considered excluding movements in foreign exchange rates. Product sales and revenue growth on a CER basis is a Non GAAP financial measure ("Non GAAP CER"), computed by comparing 2013 product sales and revenues restated using 2012 average foreign exchange rates to 2012 actual product sales and revenues. This Non GAAP financial measure is used by Shire's management, and is considered to provide useful information to investors about the Company's results of operations, because it facilitates an evaluation of the Company's year-on-year performance on a comparable basis. Average exchange rates for the year to December 31, 2013 were \$1.56:€1.00 and \$1.33:€1.00 (2012: \$1.59:€1.00 and \$1.29:€1.00).

### 3. Financial Review

#### **VYVANSE – ADHD**

VYVANSE product sales grew strongly (+19%) in 2013 primarily as a result of price increases as well as higher prescription demand, primarily due to growth in the US ADHD market (+6%).

Litigation proceedings regarding VYVANSE are ongoing. Further information about this litigation can be found in Note 19 to the consolidated financial statements.

#### **ELAPRASE – Hunter syndrome**

Reported ELAPRASE sales growth (+10%) was driven by an increase in the number of patients on therapy.

#### **LIALDA/MEZAVANT – Ulcerative colitis**

The growth in product sales for LIALDA/MEZAVANT (+32%) in 2013 was primarily driven by higher market share in the US, the effects of which were partially offset by higher sales deductions in 2013 as compared to 2012.

Litigation proceedings regarding LIALDA/MEZAVANT are ongoing. Further information about this litigation can be found in Note 19 to the consolidated financial statements.

#### **REPLAGAL – Fabry disease**

REPLAGAL sales were down 6% compared to 2012 (down 4% on a Non GAAP CER basis) as sales in 2013 were impacted by foreign exchange, pricing pressure (primarily in Europe) and slightly lower volumes due to the return of competition to the Fabry market.

#### **ADDERALL XR – ADHD**

ADDERALL XR product sales decreased 12% in 2013 as a result of higher sales deductions, partially offset by the effect of higher stocking in 2013 compared to 2012.

Litigation proceedings regarding ADDERALL XR are ongoing. Further information about this litigation and the Impax settlement, can be found in Note 19 to the consolidated financial statements.

#### **VPRIV – Gaucher disease**

Reported VPRIV sales growth of 12% was driven by an increase in the number of patients on therapy.

#### **INTUNIV – ADHD**

INTUNIV product sales were up 16% compared to 2012, driven by growth in US prescription demand (up 9% compared to 2012), together with price increases<sup>2</sup>. These positive factors were partially offset by higher sales deductions in 2013 compared to 2012.

Further information about litigation proceedings regarding INTUNIV can be found in see Note 19 to the consolidated financial statements.

#### **PENTASA – Ulcerative Colitis**

PENTASA product sales were up 6% as the benefit of price increases was partially offset by higher sales deductions in 2013 as compared to 2012.

#### **FIRAZYR – Hereditary Angioedema**

FIRAZYR sales growth (+102% compared to 2012) was primarily driven by the US market, where we continue to see both good growth in new patients and increased levels of repeat usage by existing patients.

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<sup>2</sup> The actual net effect of price increases on current period net sales compared to the comparative period is difficult to quantify due to the various managed care rebates, Medicaid discounts, other discount programs in which the Company participates and fee for service agreements with wholesalers customers.

### 3. Financial Review

#### Royalties

	Year to December 31, 2013 \$'M	Year to December 31, 2012 \$'M	Change %
FOSRENOL	48.1	53.3	-10%
3TC and ZEFFIX	46.7	91.6	-49%
ADDERALL XR	27.6	70.3	-61%
Other	31.3	26.4	19%
Total	153.7	241.6	-36%

Royalties from ADDERALL XR in 2013 were significantly impacted by the lower royalty rate payable on sales of authorized generic ADDERALL XR by Impax, following the launch of a new generic version of ADDERALL XR late in the second quarter of 2012 as well as by Impax's lower market share in 2013 versus 2012.

Royalties from 3TC and ZEFFIX in 2013 were lower, as 2012 included one-time royalty income of \$38 million in respect of prior periods due to resolution of a disagreement with GlaxoSmithKline and ViiV Healthcare.

#### Cost of product sales from continuing operations

Cost of product sales increased to \$670.8 million for the year to December 31, 2013 (14% of product sales), up from \$585.8 million in the corresponding period in 2012 (14% of product sales). The costs of product sales as a percentage of product sales remained broadly constant in 2013 as compared to 2012.

For the year to December 31, 2013 cost of product sales included depreciation of \$37.5 million (2012: \$29.0 million).

#### R&D from continuing operations

R&D expenditure decreased to \$933.4 million for the year to December 31, 2013 (20% of product sales), compared to \$953.0 million in the corresponding period in 2012 (22% of product sales). In the year to December 31, 2012 R&D included up-front payments of \$13.0 million to Sangamo and \$10.0 million to acquire the US rights for prucalopride (marketed in certain countries in Europe as RESOLOR) and IPR&D impairment charges in respect of RESOLOR of \$71.2 million (2013: \$19.9 million). Excluding these costs R&D increased by \$54.7 million or 6% in the year to December 31, 2013 due to the Company's continuing investment in a number of targeted R&D programs, particularly new uses for LDX and other recently acquired assets including SHP606 (Lifitegrast), SHP607 (for the prevention of ROP) and SHP608 (for the treatment of DEB).

R&D in the year to December 31, 2013 included depreciation of \$23.3 million (2012: \$22.5 million).

#### SG&A from continuing operations

SG&A expenditure decreased to \$1,651.3 million (35% of product sales) for the year to December 31, 2013 from \$1,948.0 million (46% of product sales) in the corresponding period in 2012. In the year to December 31, 2012 SG&A included impairment charges of \$126.7 million related to RESOLOR intangible assets and higher legal and litigation costs, including a charge of \$57.5 million in relation to the agreement in principle with the US Government. Excluding these costs SG&A decreased by \$43.1 million or 3% due to the Company's continuing focus on simplifying its business and delivering efficient growth.

### 3. Financial Review

For the year to December 31, 2013 SG&A included depreciation of \$66.8 million (2012: \$57.5 million) and amortization of \$152.0 million (2012: \$153.6 million).

#### **Goodwill impairment charges from continuing operations**

In the first quarter of 2013 Shire recorded a goodwill impairment charge of \$198.9 million (2012: \$nil) in relation to the former RM business unit. Following a review of future forecasts for the RM business unit, management determined in the first quarter of 2013 that future sales were expected to be lower than anticipated at the time of acquisition and consequently in accordance with US GAAP, it was determined that the goodwill attributable to the RM business unit was impaired. Following the divestment of DERMAGRAFT on January 16, 2014 the Company has reclassified \$191.8 million of the impairment charge (being the portion of the RM reporting unit goodwill impairment charge that related to the DERMAGRAFT business) to discontinued operations.

#### **Reorganization costs from continuing operations**

For the year to December 31, 2013 Shire recorded reorganization costs of \$88.2 million (2012: \$nil) comprising costs relating to the "One Shire" reorganization (\$64.6 million), which included involuntary termination benefits and other reorganization costs (of which approximately \$42 million was paid in cash during 2013) as the Company transitions to a new operating structure, and the cost of closing the Company's facility at Turnhout, Belgium (\$23.6 million).

#### **Integration and acquisition costs from continuing operations**

For the year to December 31, 2013 the Company recorded a net credit of \$134.1 million in integration and acquisition costs (2012: \$13.5 million charge). This comprised a credit of \$159.1 million (2012: \$9.2 million charge) relating to the change in fair values of contingent consideration liabilities, in particular relating to the acquisition of SARcode, partially offset by \$25.0 million of acquisition and integration costs, primarily for the acquisition of ViroPharma and integration of SARcode and Lotus Tissue Repair. In 2012 integration and acquisition costs was primarily related to the acquisition of FerroKin.

#### **Interest expense from continuing operations**

For the year to December 31, 2013 the Company incurred interest expense of \$38.1 million (2012: \$38.2 million). Interest expense principally related to the coupon and amortization of issue costs on the Bonds which were fully redeemed or converted in the year, and to a lesser extent costs incurred on facilities related to the purchase of ViroPharma.

#### **Taxation from continuing operations**

The effective tax rate was 16% (2012: 20%).

The effective tax rate is lower than 2012 primarily due to the impact of changes in the fair values of contingent consideration liabilities which have no tax impact and impairment charges in 2012 which had no tax benefit and were not repeated in 2013.

#### **Discontinued operations**

The loss from discontinued operations for the year to December 31, 2013 was \$754.5 million net of tax (2012: \$60.3 million), which included impairment charges in respect of the assets held for sale (\$636.9 million), goodwill impairment charges (\$191.8 million), net losses on the discontinued DERMAGRAFT business (\$252.2 million including reorganization costs) and related taxes (credits) of \$326.4 million.

#### **Financial condition at December 31, 2013**

##### **Cash & cash equivalents**

Cash and cash equivalents increased by \$757.2 million to \$2,239.4 million (December 31, 2012: \$1,482.2 million). Cash generated by operating activities of \$1,463.0 million was offset by the cost of acquiring SARcode, Premacure and Lotus, the purchase of shares (both by the employee benefit trust ("EBT") and under the share buy-back program), other capital expenditure and dividend payments.

### 3. Financial Review

#### Accounts receivable, net

Accounts receivable, net increased by \$137.0 million to \$961.2 million (December 31, 2012: \$824.2 million), primarily due to the increase in revenue in the year to December 31, 2013. Days sales outstanding decreased to 46 days (December 31, 2012: 50 days).

#### Other intangible assets, net

Other intangible assets increased by \$75.5 million to \$2,312.6 million (December 31, 2012: \$2,388.1 million), due to the IPR&D assets acquired with SARcode, Premacure and Lotus, offset by the divestment of DERMAGRAFT intangible assets, intangible asset amortization, IPR&D impairment and foreign exchange movements.

#### Convertible Bonds

As of December 31, 2013, Bondholders had voluntarily converted \$1,099,050,000 aggregate principal amount of the Bonds into 33,806,464 fully paid Ordinary Shares. The remaining outstanding Bonds in an aggregate principle amount of \$950,000 were redeemed pursuant to the Optional Redemption Notice issued on November 26, 2013.

#### Non-current deferred tax liabilities

Non-current deferred tax liabilities increased by \$39.8 million to \$560.6 million (December 31, 2012: \$520.8 million), primarily due to deferred tax liabilities arising on the IPR&D assets acquired with SARcode and Lotus offset by a reduction in deferred tax liabilities arising from the impairment of DERMAGRAFT intangible assets.

#### Other non-current liabilities

Other non-current liabilities increased by \$346.9 million to \$588.5 million (December 31, 2012: \$241.6 million) primarily due to the recognition of non-current contingent consideration payable related to the SARcode, Premacure and Lotus business combinations.

### Liquidity and capital resources

#### General

The Company's funding requirements depend on a number of factors, including the timing and extent of its development programs; corporate, business and product acquisitions; the level of resources required for the expansion of certain manufacturing and marketing capabilities as the product base expands; increases in accounts receivable and inventory which may arise with any increase in product sales; competitive and technological developments; the timing and cost of obtaining required regulatory approvals for new products; the timing and quantum of milestone payments on collaborative projects; the timing and quantum of tax and dividend payments; the timing and quantum of purchases by the EBT of Shire shares in the market to satisfy awards granted under Shire's employee share plans; and the amount of cash generated from sales of Shire's products and royalty receipts.

An important part of Shire's business strategy is to protect its products and technologies through the use of patents, proprietary technologies and trademarks, to the extent available. The Company intends to defend its intellectual property and as a result may need cash for funding the cost of litigation.

The Company finances its activities through cash generated from operating activities; credit facilities; private and public offerings of equity and debt securities; and the proceeds of asset or investment disposals.

Shire's balance sheet includes \$2,239.4 million of cash and cash equivalents at December 31, 2013. Shire has a revolving credit facility of \$1,200 million which matures in 2015, of which \$700 million was utilized on January 24, 2014 to partially fund the ViroPharma acquisition (See section "Term Loan", "Facilities Agreement" for further details). In addition in connection with its acquisition of ViroPharma, Shire entered into a \$2.60 billion Facilities Agreement which was subsequently reduced to \$1.40 billion, and comprises of two credit facilities: (i) a \$0.55 billion term loan facility, of which \$0.35 billion was utilized on January 24, 2014 and (ii) a \$0.85 billion term loan facility, fully utilized on January 24, 2014 (See section "Term Loan Agreement" for further details). Further on January 24, 2014 ViroPharma commenced a tender offer to repurchase, at the option of each holder, any and all of ViroPharma's outstanding 2.00% Convertible Senior Notes Due 2017 (the "Convertible Notes") and notified the holders of their separate right to convert the Convertible Notes. The repurchase and payment for conversion of the Convertible Notes forms part of the cash consideration payable to ViroPharma.

### 3. Financial Review

#### *Shire 2.75% Convertible Bonds due 2014*

On May 9, 2007 Shire issued \$1,100 million in principal amount of Bonds. As of December 31, 2013 all of the Bonds had been converted or redeemed as described below.

On November 26, 2013, Shire issued an optional redemption notice under the Trust Deed to the holders of the Bonds. The aggregate outstanding principal amount of Bonds on November 25, 2013, the last practicable date prior to the date of the optional redemption notice, was \$1,075,070,000. The last day on which bondholders were able to exercise their conversion rights was December 13, 2013. Those Bonds which were not voluntarily converted were redeemed by the Company on December 27, 2013 at par together with interest accrued to that date. As of December 31, 2013, Bonds in an aggregate principal amount of the \$1,099,050,000 had been voluntarily converted into 33,806,464 fully paid Ordinary Shares at a conversion price of US\$32.51 per Ordinary Share, in the capital of the Company, with par value of £0.05 each. The remaining outstanding Bonds in an aggregate principle amount of \$950,000 were redeemed pursuant to the Optional Redemption Notice issued on November 26, 2013. Following the redemption of all the outstanding Bonds, the Company cancelled the listing of the Bonds on the Official List maintained by the UK Listing Authority and the admission to trading of the Bonds on the Professional Securities Market of the London Stock Exchange.

#### *Revolving Credit Facilities Agreement*

On November 23, 2010, the Company entered into a committed multicurrency revolving and swingline facilities agreement with a number of financial institutions, for which Abbey National Treasury Services Plc (trading as Santander Global Banking and Markets), Bank of America Securities Limited, Barclays Capital, Citigroup Global Markets Limited, Lloyds TSB Bank plc and The Royal Bank of Scotland plc acted as mandated lead arrangers and bookrunners (the "RCF"). The RCF is for an aggregate amount of \$1,200 million and cancelled the Company's then existing committed revolving credit facility. The RCF, which includes a \$250 million swingline facility, may be used for general corporate purposes and matures on November 23, 2015.

The interest rate on each loan drawn under the RCF for each interest period is the percentage rate per annum which is the aggregate of the applicable margin (ranging from 0.90 to 2.25 per cent per annum) and LIBOR for the applicable currency and interest period. Shire also pays a commitment fee on undrawn amounts at 35 per cent per annum of the applicable margin.

Under the RCF it is required that (i) Shire's ratio of Net Debt to EBITDA (as defined within the RCF agreement) does not exceed 3.5 to 1 for either the 12 month period ending December 31 or June 30 unless Shire has exercised its option (which is subject to certain conditions) to increase it to 4.0 to 1 for two consecutive testing dates; (ii) the ratio of EBITDA to Net Interest (as defined in the RCF agreement) must not be less than 4.0 to 1, for either the 12 month period ending December 31 or June 30, and (iii) additional limitations on the creation of liens, disposal of assets, incurrence of indebtedness, making of loans, giving of guarantees and granting security over assets. These financial and operating covenants have not had, and are not expected to have, an effect on the Company's financial position and liquidity.

On entering into the RCF in November 2010 the Company paid arrangement costs of \$8.0 million, which have been recorded as deferred charges, with amortization of these costs to the Company's income statement over the contractual term of the RCF.

The availability of loans under the new RCF is subject to customary conditions.

#### *Term Loan Agreement*

On November 11, 2013, Shire entered into a \$2.60 billion Facilities Agreement with, among others, Morgan Stanley Bank International Limited (acting as lead arranger and agent) (the "Facilities Agreement"). The Facilities Agreement comprises two credit facilities: (i) a \$1.75 billion term loan facility and (ii) a \$0.85 billion term loan facility.

On December 13, 2013 and on February 21, 2014, the Company cancelled part of the \$2.60 billion term loan facility. The revised Facilities Agreement of \$1.40 billion now comprises two credit facilities: (i) a \$0.55 billion term loan facility and (ii) a \$0.85 billion term loan facility. All other terms and conditions remain unchanged.

The \$0.55 billion term loan facility, which matures on November 10, 2014, may be used only to finance the purchase price payable in respect of Shire's acquisition of ViroPharma (including certain related costs) and for the redemption of Shire's Bonds. Shire has the option to extend the maturity of the \$0.55 billion term loan facility once by a further 364 days.

### 3. Financial Review

The \$0.85 billion term loan facility, which matures on November 11, 2015, may be used only to finance the purchase price payable in respect of Shire's acquisition of ViroPharma (including certain related costs).

Interest on any loans made under the facilities will be payable on the last day of each interest period, which may be one week or one, two, three or six months at the election of Shire, or as otherwise agreed with the lenders. The interest rate applicable to the \$0.55 billion term loan facility is LIBOR plus 0.75% per annum and increases by 0.25% per annum on August 11, 2014 and on three-month intervals thereafter.

The interest rate applicable to the \$0.85 billion term loan facility commenced at LIBOR plus 1.15% per annum until delivery of the compliance certificate for the year ending December 31, 2013 and thereafter is subject to change depending upon the prevailing ratio of Net Debt to EBITDA of the Group (each as defined in the Facilities Agreement), in respect of the most recently completed financial year or financial half year.

Shire shall also pay a commitment fee on the available but unutilized commitments under the \$0.55 billion term loan facility and the \$0.85 billion term loan facility for the availability period applicable to each facility. With effect from first utilization, the commitment fee rate will be 35% of the applicable margin. Before first utilization, the commitment fee rate will increase in stages from 0% to 35% of the applicable margin over a period of 3 months.

The Facilities Agreement includes customary representations and warranties, covenants and events of default, including requirements that the ratio of Net Debt to EBITDA of the Group (each as defined in the Facilities Agreement) must not, at any time, exceed 3.5:1 for the Relevant Period (as defined in the Facilities Agreement), except that following certain acquisitions, including the ViroPharma acquisition, Shire may elect to increase the ratio to 4.0:1 in the relevant period in which the acquisition was completed and the immediately following relevant period. In addition, for each 12-month period ending December 31 or June 30, the ratio of EBITDA of the Group to Net Interest (each as defined in the Facilities Agreement) must not be less than 4.0:1.

The Facilities Agreement restricts (subject to certain covenants) Shire's ability to incur additional financial indebtedness, grant security over its assets or provide or guarantee loans. Further, any lender may require mandatory prepayment of its participation if there is a change of control of Shire. In addition, in certain circumstances, the net proceeds of certain shares, undertakings or business disposals by Shire must be applied towards the mandatory prepayment of the facilities, subject to certain exceptions.

Events of default under the facilities include: (i) non-payment of any amounts due under the facilities, (ii) failure to satisfy any financial covenants, (iii) material misrepresentation in any of the finance documents, (iv) failure to pay, or certain other defaults, under other financial indebtedness, (v) certain insolvency events or proceedings, (vi) material adverse changes in the business, operations, assets or financial condition of Shire and its subsidiaries, (vii) if it becomes unlawful for Shire or any of its subsidiaries that are parties to the Facilities Agreement to perform their obligations or (viii) if Shire or any subsidiary of Shire which is a party to the Facilities Agreement repudiates the Facilities Agreement or any other finance document, among others.

The Facilities Agreement is governed by English law.

#### *Financing*

Shire anticipates that its operating cash flow together with available cash, cash equivalents and the RCF will be sufficient to meet its anticipated future operating expenses, capital expenditures, tax and interest payments, lease obligations and milestone payments as they become due over the next twelve months.

Shire's existing cash, the Facilities Agreement and the RCF are sufficient to finance the acquisition of ViroPharma.

If the Company decides to acquire other businesses in addition to ViroPharma, it expects to fund these acquisitions from cash resources, the RCF and possibly through new borrowings or the issuance of new equity if necessary.

#### Share buy-back program

Shire has a strong balance sheet and continued robust cash generation, and considers efficient use of capital on behalf of shareholders an important objective. Therefore, during the year to December 31, 2012 the Company commenced a share buy-back program, for the purpose of returning funds to shareholders, of up to \$500 million through both direct purchases of Ordinary Shares and through the purchase of Ordinary Shares underlying ADRs.

During the year ended December 31, 2013, the Company made on-market repurchases totaling 6,191,965 Ordinary Shares at a cost of \$193 million (excluding transaction costs). The program covers purchases of

### 3. Financial Review

Ordinary Shares for cancellation or to be held as treasury shares, in accordance with the authority renewed by shareholders at the Company's AGM on April 30, 2013 when the Company was authorized to make market purchases of up to 55,741,587 of its own Ordinary Shares.

On November 11, 2013, contemporaneous with Shire's announcement of its acquisition of ViroPharma, the Company's share buyback program was terminated. Since the inception of the share buyback program the Company had purchased \$300 million of Ordinary Shares and Ordinary Shares underlying ADRs.

#### Sources and uses of cash

The following table provides an analysis of the Company's gross and net cash (excluding restricted cash), as at December 31, 2013 and 2012:

	2013	2012
December 31,	\$'M	\$'M
Cash and cash equivalents <sup>1</sup>	2,239.4	1,482.2
Shire 2.75% Convertible bonds	-	(1,100.0)
Other debt	(8.9)	(9.3)
Total debt	(8.9)	(1,109.3)
Net cash	2,230.5	372.9

1. Substantially all of the Company's cash and cash equivalents are held by foreign subsidiaries (i.e. those subsidiaries incorporated outside of Jersey, Channel Islands, the jurisdiction of incorporation of Shire plc, Shire's holding company). The amount of cash and cash equivalents held by foreign subsidiaries has not had, and is not expected to have, a material impact on the Company's liquidity and capital resources.

Net cash is a Non GAAP measure. The Company believes that Net cash is a useful measure as it indicates the level of borrowings after taking account the cash and cash equivalents that could be utilized to pay down the outstanding borrowings.

#### Cash flow activity

Net cash provided by operating activities for the year to December 31, 2013 increased by \$80.1 million or 6% to \$1,463.0 million (2012: \$1,382.9 million) as higher cash receipts from gross product sales were more than offset by payments made in relation to the One Shire reorganization (approximately \$42 million), costs incurred on the closure of Shire's facility at Turnhout in Belgium (approximately \$24 million) and the payment to settle the litigation with Impax (\$48 million) (see Note 19 for details).

Net cash provided by operating activities for the year to December 31, 2012 increased by \$309.3 million or 29% to \$1,382.9 million (2011: \$1,073.6 million) as higher cash receipts from gross product sales and improved cash collections for aged European receivables more than offset higher operating expenses and sales deduction payments in the year.

Net cash used in investing activities was \$360.9 million in the year to December 31, 2013, principally relating to the cash paid (net of cash acquired) for the acquisitions of SARcode, Premacure and Lotus Tissue Repair and for purchases of PP&E.

Net cash used in investing activities was \$271.0 million in the year to December 31, 2012, principally relating to the expenditure on property, plant and equipment of \$149.6 million and the cash paid (net of cash acquired) of \$97.0 million for the acquisition of FerroKin (\$94.5 million) and Pervasis (\$2.5 million). Capital expenditure on property, plant and equipment primarily includes expenditure of \$65.0 million on computer software and hardware due to SAP upgrade and construction and leasehold improvements at different Company sites of \$45.2 million.

Net cash used in financing activities was \$344.6 million for the year to December 31, 2013, principally due to the purchase of shares under the share buy-back program, purchase of shares by the EBT and the dividend payment.

### 3. Financial Review

Net cash used in financing activities was \$244.3 million for the year to December 31, 2012, principally due to the purchase of shares by the EBT, the purchase of shares under the share buy-back program and dividend payments, offset by the tax benefit associated with the exercise of stock options.

#### Outstanding letters of credit

At December 31, 2013, the Company had irrevocable standby letters of credit and guarantees with various banks totaling \$51.3 million, providing security for the Company's performance of various obligations. These obligations are primarily in respect of the recoverability of insurance claims, lease obligations and supply commitments.

#### Cash Requirements

At December 31, 2013 the Company's cash requirements for long term liabilities reflected on the Balance Sheet and other contractual obligations were as follows:

	Payments due by period				
	Total	Less than			More than
		1 year	1 – 3 years	3 – 5 years	5 years
\$'M	\$'M	\$'M	\$'M	\$'M	
Operating leases obligation <sup>(i)</sup>	215.9	44.9	57.5	30.1	83.4
Purchase obligations <sup>(ii)</sup>	609.8	500.1	96.2	11.9	1.6
Other long term liabilities reflected on the Balance Sheet <sup>(iii)</sup>	578.5	-	375.3	72.6	130.6
<b>Total</b>	<b>1,404.2</b>	<b>545.0</b>	<b>529.0</b>	<b>114.6</b>	<b>215.6</b>

(i) The Company leases certain land, facilities, motor vehicles and certain equipment under operating leases expiring through 2021.

(ii) Purchase obligations include agreements to purchase goods, investments or services (including clinical trials, contract manufacturing and capital equipment), including open purchase orders, that are enforceable and legally binding and that specify all significant terms. Shire expects to fund these commitments with cash flows from operating activities.

(iii) Unrecognized tax benefits and associated interest and penalties of \$115.7 million are included within payments due in one to three years.

The contractual obligations table above does not include certain milestones and other contractual commitments where payment is contingent upon the occurrence of events which are yet to occur (and therefore payment is not yet due). At December 31, 2013 the most significant of the Company's milestone and contractual commitments which are contingent on the occurrence of future events are as follows:

(i) Research Collaboration with Santaris Pharma A/S ("Santaris") on Locked Nucleic Acid ("LNA") Drug Platform

On August 24, 2009, Shire announced that it had entered into a research collaboration with Santaris, to develop its proprietary LNA technology in a range of rare diseases. LNA technology has the benefit of shortened target validation and proof of concept, potentially increasing the speed and lowering the cost of development. As part of the joint research project Santaris will design, develop and deliver pre-clinical LNA oligonucleotides for Shire-selected orphan disease targets, and Shire will have the exclusive right to further develop and commercialize these candidate compounds on a worldwide basis.

In the year to December 31, 2013, Shire paid success milestones and other support costs of \$1.5 million (2012: \$3.0 million;) and \$4.5 million (2012: \$8.1 million) to Santaris respectively, which were expensed to R&D. Shire has remaining obligations to pay Santaris development and sales milestones up to a maximum

### 3. Financial Review

of \$71.0 million for current indication. Shire will also pay single or double digit tiered royalties on net sales of the product.

Shire and Santaris have formed a joint research committee to monitor R&D activities through preclinical lead candidate selection at which point all development and commercialization costs will be the responsibility of Shire.

#### (ii) Collaboration and license agreement with Sangamo to develop therapeutics for hemophilia

On February 1, 2012 Shire and Sangamo announced that they had entered into a collaboration and license agreement to develop therapeutics for hemophilia and other monogenic diseases based on Sangamo's ZFP technology. Sangamo is responsible for all activities through submission of Investigational New Drug Applications and European Clinical Trial Applications for each product and Shire will reimburse Sangamo for its internal and external research program-related costs. Shire is responsible for clinical development and commercialization of products arising from the collaboration.

In the year to December 31, 2012 Shire made an upfront payment to Sangamo of \$13.0 million, for technology access and R&D funding, which was expensed to R&D.

In the year to December 31, 2013 Shire's share of R&D costs under this collaboration agreement was \$15.2 million (2012: \$8.9 million) which were expensed to R&D. Shire may be required to pay research, regulatory, development and commercial milestone payments up to a maximum of \$213.5 million and to pay royalties on net sales of the product.

#### (iii) Acquisition of FerroKin

On April 2, 2012 Shire completed the acquisition of 100% of the outstanding share capital of FerroKin. The acquisition-date fair value of consideration totaled \$159.3 million, comprising cash consideration paid on closing of \$94.5 million and the fair value of contingent consideration payable of \$64.8 million. The maximum amount of contingent cash consideration which may be payable by Shire in future periods is \$225.0 million. The amount of contingent cash consideration ultimately payable by Shire is dependent upon the achievement of certain clinical development, regulatory and net sales milestones. For further details refer to Note 4 to the consolidated financial statements.

#### (iv) Acquisition of certain assets & liabilities of Pervasis

On April 19, 2012, Shire acquired substantially all the assets and certain liabilities of Pervasis. The acquisition date fair value of the consideration totaled \$26.1 million, comprising cash consideration paid on closing of \$2.5 million and the fair value of contingent consideration payable of \$23.6 million. The maximum amount of contingent cash consideration which may be payable by Shire in future periods is \$169.5 million. The amount of contingent cash consideration ultimately payable by Shire is dependent upon achievement of certain clinical development, regulatory and net sales milestones. For further details refer to Note 4 to the consolidated financial statements.

#### (v) Acquisition of Lotus Tissue Repair

On February 12, 2013 Shire completed the acquisition of 100% of the outstanding share capital of Lotus Tissue Repair. The acquisition date fair value of consideration totaled \$174.2 million, comprising cash consideration paid on closing of \$49.4 million, and the fair value of contingent consideration payable of \$124.8 million. The maximum amount of contingent cash consideration which may be payable by Shire in future periods is \$275 million. The amount of contingent cash consideration ultimately payable by Shire is dependent upon achievement of certain pre-clinical and clinical development milestones. For further details refer to Note 4 to the consolidated financial statements.

#### (vi) Acquisition of Premacure

On March 8, 2013 Shire completed the acquisition of 100% of the outstanding share capital of Premacure. The acquisition date fair value of the consideration totaled \$140.2 million, comprising cash consideration paid on closing of \$30.6 million, and the fair value of contingent consideration payable of \$109.6 million. The maximum amount of contingent cash consideration which may be payable by Shire in future periods, dependent upon the successful completion of certain development and commercial milestones, is \$169 million. Shire will also pay royalties on relevant net sales. For further details refer to Note 4 to the consolidated financial statements.

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#### (vii) Acquisition of SARcode

On April 17, 2013 Shire completed the acquisition of 100% of the outstanding share capital of SARcode. The acquisition date fair value of the consideration totaled \$368 million, comprising cash consideration paid on closing of \$151 million and the fair value of contingent consideration payable of \$217 million. The maximum amount of contingent cash consideration which may be payable by Shire in future periods is \$225 million dependent upon achievement of certain clinical, regulatory and net sales milestones. For further details refer to Note 4 to the consolidated financial statements.

#### (viii) Acquisition of ViroPharma

On November 11, 2013, Shire signed a definitive agreement to acquire all of the outstanding share capital of ViroPharma for \$50 per share in cash or approximately \$4.2 billion. The transaction was completed on January 24, 2014 at which time ViroPharma became a wholly-owned subsidiary. Shire's consolidated financial statements will reflect the fair values of assets acquired and the liabilities assumed at, and the results of ViroPharma will be included in Shire's consolidated statement of income from, January 24, 2014. Further on January 24, 2014 ViroPharma commenced a tender offer to repurchase, at the option of each holder, any and all of ViroPharma's Convertible Notes and notified the holders of their separate right to convert the Convertible Notes. The repurchase and payment for conversion of the Convertible Notes forms part of the cash consideration payable to ViroPharma. For further details refer to Note 4 to the consolidated financial statements.

#### Off-balance sheet arrangements

There are no off-balance sheet arrangements, aside from the collaborations containing contractual commitments and milestones which are contingent on future events as outlined above, that have, or are reasonably likely to have, a current or future material effect on the Company's financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

#### Foreign currency fluctuations

A number of the Company's subsidiaries have a functional currency other than the US Dollar. As such, the consolidated financial results are subject to fluctuations in exchange rates, particularly in the Euro, Swiss Franc and Pound Sterling against the US Dollar.

The accumulated foreign currency translation differences at December 31, 2013 of \$25.3 million are reported within accumulated other comprehensive income in the consolidated balance sheet and foreign exchange losses for the year to December 31, 2013 of \$8.7 million are reported in the consolidated statements of income.

At December 31, 2013, the Company had outstanding swap and forward foreign exchange contracts to manage the currency risk associated with intercompany transactions. At December 31, 2013 the fair value of these contracts was a net asset of \$1.2 million.

#### Concentration of credit risk

Financial instruments that potentially expose Shire to concentrations of credit risk consist primarily of short term cash investments, derivative contracts and trade accounts receivable (from product sales and from third parties from which the Company receives royalties). Cash is invested in short term money market instruments, including money market and liquidity funds and bank term deposits. The money market and liquidity funds in which Shire invests are all triple A rated by both Standard and Poor's and by Moody's credit rating agencies.

The Company is exposed to the credit risk of the counterparties with which it enters into derivative instruments. The Company limits this exposure through a system of internal credit limits which vary according to ratings assigned to the counterparties by the major rating agencies. The internal credit limits are approved by the Board and exposure against these limits is monitored by the corporate treasury function. The counterparties to these derivatives contracts are major international financial institutions.

The Company's revenues from product sales in the US are mainly governed by agreements with major pharmaceutical wholesalers and relationships with other pharmaceutical distributors and retail pharmacy chains. For the year to December 31, 2013 there were three customers in the US that accounted for 52% of the Company's product sales. However, such customers typically have significant cash resources and as such the risk from concentration of credit is considered acceptable. The Company has taken positive steps to manage any credit risk associated with these transactions and operates clearly defined credit evaluation

### 3. Financial Review

procedures. However, an inability of one or more of these wholesalers to honor their debts to the Company could have an adverse effect on Company's financial condition and results of operations.

A substantial portion of the Company's accounts receivable in countries outside of the United States is derived from product sales to government-owned or government-supported healthcare providers. The Company's recovery of these accounts receivable is therefore dependent upon the financial stability and creditworthiness of the relevant governments. In recent years the creditworthiness and general economic condition of a number of Eurozone countries (including Greece, Italy, Portugal and Spain (the "Relevant Countries")) has deteriorated. As a result, in some of these countries the Company is experiencing delays in the remittance of receivables due from government-owned or government-supported healthcare providers.

The Company continued to receive remittances in relation to government-owned or government-supported healthcare providers in all the Relevant Countries in the year to December 31, 2013, including receipts of \$116.8 million and \$144.7 million in respect of Spanish and Italian receivables, respectively.

To date the Company has not incurred significant losses on accounts receivable in the Relevant Countries, and continues to consider that such accounts receivable are recoverable. The Company will continue to evaluate all its accounts receivable for potential collection risks and has made provision for amounts where collection is considered to be doubtful. If the financial condition of the Relevant Countries or other Eurozone countries suffer significant deterioration, such that their ability to make payments becomes uncertain, or if one or more Eurozone member countries withdraws from the Euro, additional allowances for doubtful accounts may be required, and losses may be incurred, in future periods. Any such loss could have an adverse effect on the Company's financial condition and results of operations.

#### Inflation

Although at reduced levels in recent years, inflation continues to apply upward pressure on the cost of goods and services which are used in the business. However, the Company believes that the net effect of inflation on its revenues and operations has been minimal during the past three years.

#### Treasury policies and organization

The Company's principal treasury operations are coordinated by its corporate treasury function. All treasury operations are conducted within a framework of policies and procedures approved annually by the Board of Directors. As a matter of policy, the Company does not undertake speculative transactions that would increase its credit, currency or interest rate exposure.

#### Interest rate risk

The Company is exposed to interest rate risk on its \$1,200 million RCF, its \$0.55 billion term loan facility, its \$0.85 billion term loan facility (the "Facilities"), to the extent the Facilities are utilized, restricted cash, cash and cash equivalents and on foreign exchange contracts on which interest is at floating rates. This exposure is primarily to US dollar, Pounds sterling, Euro and Canadian dollar interest rates. The Company has evaluated the interest rate risk on its debt facilities and considers the floating rate as appropriate. As the Company maintains all of its cash, liquid investments and foreign exchange contracts on a short term basis for liquidity purposes, this risk is not actively managed. In the year to December 31, 2013 the average interest rate received on cash and liquid investments was less than 1% per annum. The largest proportion of these cash and liquid investments was in US dollar money market and liquidity funds. At December 31, 2013 the Facilities were not utilized.

No derivative instruments were entered into during the year to December 31, 2013 to manage interest rate exposure. The Company continues to review its interest rate risk and the policies in place to manage the risk.

#### Foreign exchange risk

The Company trades in numerous countries and as a consequence has transactional and translational foreign exchange exposures.

Transactional exposure arises where transactions occur in currencies different to the functional currency of the relevant subsidiary. The main trading currencies of the Company are the US dollar, Pounds Sterling, Swiss Franc and the Euro. It is the Company's policy that these exposures are minimized to the extent practicable by denominating transactions in the subsidiary's functional currency.

### 3. Financial Review

Where significant exposures remain, the Company uses foreign exchange contracts (being spot, forward and swap contracts) to manage the exposure for balance sheet assets and liabilities that are denominated in currencies different to the functional currency of the relevant subsidiary. These assets and liabilities relate predominantly to intercompany financing. The foreign exchange contracts have not been designated as hedging instruments. Cash flows from derivative instruments are presented within net cash provided by operating activities in the consolidated cash flow statement, unless the derivative instruments are economically hedging specific investing or financing activities.

Translational foreign exchange exposure arises on the translation into US dollars of the financial statements of non-US dollar functional subsidiaries.

At December 31, 2013 the Company had 29 swap and forward foreign exchange contracts outstanding to manage currency risk. The swap and forward contracts mature within 90 days. The Company did not have credit risk related contingent features or collateral linked to the derivatives. The Company has master netting agreements with a number of counterparties to these foreign exchange contracts and on the occurrence of specified events, the Company has the ability to terminate contracts and settle them with a net payment by one party to the other. The Company has elected to present derivative assets and derivative liabilities on a gross basis in the consolidated balance sheet. As at December 31, 2013 the potential effect of rights of set off associated with the foreign exchange contracts would be an offset to both assets and liabilities of \$0.7 million, resulting in net derivative assets and derivative liabilities of \$3.3 million and \$2.1 million, respectively.

Further details are included below.

#### Foreign exchange risk sensitivity

The following exchange rate sensitivity analysis summarises the sensitivity of the Company's reported revenues and net income to hypothetical changes in the average annual exchange rates of the Euro, Pound Sterling and Swiss Franc against the US Dollar, (assuming a hypothetical 10% strengthening of the US Dollar against each of the aforementioned currencies in the year to December 31, 2013):

	Increase/(reduction) in revenues	Increase/(reduction) in net income
	\$M	\$M
Euro	(78)	(36)
Pound Sterling	(19)	(7)
Swiss Franc	-	9

A 10% weakening of the US Dollar against the aforementioned currencies would have an equal and opposite effect.

The table below provides information about the Company's swap and forward foreign exchange contracts by currency pair. The table presents the net principal amounts and weighted average exchange rates of all outstanding contracts. All contracts have a maturity date of less than three months.

December 31, 2013	Principal Value of Amount Receivable \$'M	Weighted Average Exchange Rate	Fair Value \$'M
	_____	_____	_____
Swap foreign exchange contracts			
Receive USD/Pay EUR	256.0	1.36	(2.2)
Receive GBP/Pay USD	158.0	1.62	2.8
Receive USD/Pay JPY	1.6	0.01	-

### 3. Financial Review

Receive SEK/Pay USD	24.3	0.15	0.6
Receive USD/Pay MXN	10.4	0.08	-

#### Concentration of credit risk

Financial instruments that potentially expose Shire to concentrations of credit risk consist primarily of short-term cash investments, derivative contracts and trade accounts receivable (from product sales and from third parties from which the Company receives royalties). Cash is invested in short-term money market instruments, including money market and liquidity funds and bank term deposits. The money market and liquidity funds in which Shire invests are all triple A rated by both Standard and Poor's and by Moody's credit rating agencies.

The Company is exposed to the credit risk of the counterparties with which it enters into derivative instruments. The Company limits this exposure through a system of internal credit limits which vary according to ratings assigned to the counterparties by the major rating agencies. The internal credit limits are approved by the Board and exposure against these limits is monitored by the corporate treasury function. The counterparties to these derivatives contracts are major international financial institutions.

The Company's revenues from product sales in the US are mainly governed by agreements with major pharmaceutical wholesalers and relationships with other pharmaceutical distributors and retail pharmacy chains. For the year to December 31, 2013 there were three customers in the US that accounted for 52% of the Company's product sales. However, such customers typically have significant cash resources and as such the risk from concentration of credit is considered acceptable. The Company has taken positive steps to manage any credit risk associated with these transactions and operates clearly defined credit evaluation procedures. However, an inability of one or more of these wholesalers to honor their debts to the Company could have an adverse effect on the Company's financial condition and results of operations.

A substantial portion of the Company's accounts receivable in countries outside of the United States is derived from product sales to government-owned or government-supported healthcare providers. The Company's recovery of these accounts receivable is therefore dependent upon the financial stability and creditworthiness of the relevant governments. In recent years the creditworthiness and general economic condition of the Relevant Countries has deteriorated. As a result, in some of these countries the Company is experiencing delays in the remittance of receivables due from government-owned or government-supported healthcare providers.

The Company's aggregate accounts receivable, net of the allowance for doubtful accounts, in total from government-owned or government-supported healthcare providers in the Relevant Countries are as follows:

	<b>December 31, 2013</b>	<b>December 31, 2012</b>
	<b>\$'M</b>	<b>\$'M</b>
Total accounts receivable, net in the Relevant Countries	127	136
Total accounts receivable, net in the Relevant Countries as a percentage of total outstanding accounts receivable, net	13%	17%
Accounts receivable, net due from government-owned or government-supported healthcare providers for the Relevant Countries	116	129

Accounts receivable due from government-owned or government-supported healthcare providers in the Relevant Countries of \$116 million (2012: \$130 million) are split by country as follows: Greece \$4 million (2012: \$6 million); Italy \$59 million (2012: \$62 million); Portugal \$14 million (2012: \$13 million) and Spain \$39 million (2012: \$48 million).

The Company continues to receive remittances in relation to government-owned or government-supported healthcare providers in the Relevant Countries and in the year to December 31, 2013 received \$284.9 million

### 3. Financial Review

in settlement of accounts receivable in the Relevant Countries - \$9.5 million was from Greece; \$145.0 million from Italy; \$13.4 million from Portugal and \$117.0 million from Spain.

To date the Company has not incurred significant losses on the accounts receivable in the Relevant Countries, and continues to consider that such accounts receivable are recoverable.

Other than the accounts receivable from government-owned or supported healthcare providers outlined above, the Company does not hold any other government debt from the Relevant Countries. Additionally the Company does not consider it is currently exposed to significant sovereign credit risk outside of the Relevant Countries.

The Company continues to evaluate all its accounts receivable for potential collection risks and has made provision for amounts where collection is considered to be doubtful. If the financial condition of the Relevant Countries or other Eurozone countries suffer significant deterioration, such that their ability to make payments becomes uncertain, or if one or more Eurozone member countries withdraws from the Euro, additional allowances for doubtful accounts may be required, and losses may be incurred, in future periods. Any such loss could have an adverse effect on the Company's financial condition and results of operations.

## **4. Principal risks and uncertainties**

The Company has adopted a risk management strategy designed to identify, assess and manage the significant risks that it faces. While the Company aims to identify and manage such risks, no risk management strategy can provide absolute assurance against loss.

### **Mitigation of principal risks**

The management and mitigation of risks are a key focus of the Board which, together with the Audit, Compliance & Risk (“ACR”) Committee, reviews risks impacting the Company on a timely basis as they arise, as well as periodically. In addition, the Company has established a Risk Council, which is supported by the Global Compliance and Risk Management (“GCRM”) Department, to oversee the management and mitigation of the principal risks faced by the Company, as set out below. The Risk Council and the GCRM Department are respectively chaired and managed by the Chief Compliance and Risk Officer.

### **Risk Council**

The Risk Council’s membership includes senior members of the Company’s business units and corporate functions, in addition to the Head of Internal Audit. It is charged with overseeing the Company’s risk management process and activities, and as such, ensures that each business unit and corporate function periodically reviews the significant risks they face in accordance with an approved framework. This review, which occurs biannually, includes identifying operational risks, compliance risks and risks to the achievement of goals and objectives. The Risk Council ensures that there is an owner who is responsible for the management or mitigation of each identified risk. Material risks and associated mitigation plans are recorded on a corporate risk schedule for ongoing review and assessment by the Risk Council, which is also reviewed and validated by the Executive Committee. In addition, the risk schedule is reviewed biannually by the ACR Committee, and annually by the Board.

### **GCRM**

The GCRM Department is responsible for supporting the development and implementation of practices that facilitate employees’ compliance with laws and Company policy. The principal focus of the Department’s compliance effort is to prevent and detect misconduct or non-compliance with laws or regulations through the promotion of ethical behavior, policy development, appropriate training, monitoring and audit. The GCRM Department provides assistance to help employees meet high ethical standards and comply with applicable laws and regulations; encouraging them to seek help and to report suspected cases of misconduct without fear of retaliation (further details are available on page 61 of Shire’s 2013 Annual Report).

### **Chief Compliance and Risk Officer**

The Chief Compliance and Risk Officer, who reports directly to the Chief Executive, has access at all times to the Chairman of the ACR Committee which provides a mechanism for bypassing executive management should the need arise. In addition, the ACR Committee is regularly provided with summary reports on the Risk Council and general compliance activities.

### **Risk Factors**

Set out below are the Company’s key risk factors that have been identified through the implementation of the Company’s risk management strategy. Some of these risk factors are specific to the Company, and others are more generally applicable to the pharmaceutical industry or specific markets within which the Company operates. The Company considers that these risk factors apply equally and therefore all should be carefully considered before any investment is made in Shire.

## 4. Principal risks and uncertainties

### RISK FACTORS RELATED TO THE COMPANY'S BUSINESS

#### ***The Company's products may not be a commercial success***

The commercial success of the Company's marketed products and other new products that the Company may launch in the future, will depend on their approval and acceptance by physicians, patients and other key decision-makers, as well as the receipt of marketing approvals in different countries, the time taken to obtain such approvals, the scope of marketing approvals as reflected in the product labels, approval of reimbursement at commercially sustainable prices in those countries where price and reimbursement is negotiated, and safety, efficacy, convenience and cost-effectiveness of the product as compared to competitive products.

The Company's revenues, financial condition or results of operations may be adversely affected if any or all of the following occur:

- if the Company's products, or competitive products, are genericized;
- if the prices of the Company's products suffer forced reductions or if prices of competitor products are reduced significantly;
- if there are unanticipated adverse events experienced with the Company's products or those of a competitor's product not seen in clinical trials that impact physicians' willingness to prescribe the Company's products;
- if issues arise from clinical trials being conducted for post-marketing purposes or for registration in another country which raise questions or concerns about a product;
- if the regulatory agencies in one country act in a way that raises concerns for regulatory agencies or for prescribers or patients in another country;
- if patients, payors or physicians favor other treatments over the Company's products;
- if the Company's products are subject to more stringent government regulation than competitor products;
- if patent protection or other forms of exclusivity are lost or curtailed, or if competitors are able to challenge or circumvent the Company's patents or other forms of exclusivity (See Note 19 to the consolidated financial statements set forth in Shire's 2013 Annual Report for details of current litigation);
- if launch of the Company's products in new markets is not successful;
- if the sizes of the patient populations for the Company's products are less than expected; or
- if there are lawsuits filed against Shire, including but not limited to, product liability claims, consumer law claims, and payor or reimbursement litigation.

If the Company is unable to commercialize its products successfully, there may be a material adverse effect on the Company's revenues, financial condition or results of operations.

#### ***Revenues from ADDERALL XR are subject to generic competition and revenues from INTUNIV will become subject to generic erosion starting in December 2014***

During 2012 the FDA clarified the regulatory pathway required for approval of generic versions of ADDERALL XR. Consequently in June 2012 and February 2013, Actavis and Teva, respectively, received approval to launch their own generic versions of ADDERALL XR. Shire currently sells authorized generic versions of ADDERALL XR to Teva and Impax and also continues to sell the branded version of ADDERALL XR.

In 2013, Shire settled a number of patent lawsuits in the United States against certain companies that had filed for approval of their generic versions of INTUNIV. Under the terms of the settlements, Actavis was granted a license to make and market Actavis's generic versions of INTUNIV in the United States on December 1, 2014. All other parties with whom Shire has settled will be able to enter the market with their respective ANDA-approved products after Actavis's 180 day exclusivity period has expired.

Revenues from ADDERALL XR declined following the launch of Actavis' generic version of ADDERALL XR. Revenues from INTUNIV are expected to decline as a result of the launch of Actavis' generic versions of

## 4. Principal risks and uncertainties

INTUNIV and to decline further following the expected launch of generic versions of INTUNIV by other companies after Actavis's 180 day exclusivity period expires.

Factors which could cause further or more rapid revenue decline include:

- generic or authorized generic versions of the Company's products capture more of Shire's branded market share than expected;
- the FDA approves additional ANDAs for generic versions of the Company's products which, if launched, further reduce branded market share or impact the amount of authorized generic sales and related royalties;
- the production of ADDERALL XR is disrupted by difficulties in obtaining a sufficient supply of amphetamine salts including, but not limited to, an inability to obtain sufficient quota from the DEA;
- there are changes in reimbursement policies of third-party payors; or
- there are changes to the level of sales deductions for ADDERALL XR and INTUNIV for private or public payors.

***The failure to obtain and maintain reimbursement, or an adequate level of reimbursement, by third-party payors in a timely manner for the Company's products may impact future revenues, financial condition and results of operations.***

The Company's revenues are partly dependent on the level of reimbursement provided to the Company by governmental reimbursement schemes for its products. Changes to governmental policy or practices could adversely affect the Company's revenues, financial condition and results of operations. In addition, the reimbursement of treatments by health care providers, private health insurers and other organizations, such as health maintenance organizations and managed care organizations is under downward pressure and this, in turn, could adversely impact the prices at which the Company can sell its products. Factors affecting the Company's ability to obtain and maintain adequate reimbursement for its products include:

- higher levels of controls on the use of the Company's products and/or requirements for additional price concessions by managed health care organizations or government authorities;
- legislative proposals to reform health care and government insurance programs in many of the Company's markets; and
- price controls, unsuccessful government tenders, or non-reimbursement of new medicines or new indications.

The cost of treatment for some of the Company's products is high, particularly those which are used for the treatment of rare genetic diseases. The Company may encounter difficulty in obtaining or maintaining satisfactory pricing and reimbursement for such products. The failure to obtain and maintain pricing and reimbursement at satisfactory levels for its products may adversely affect the Company's revenues, financial condition or results of operations.

***The Company conducts its own manufacturing operations for certain of its Rare Diseases products and is reliant on third party contract manufacturers to manufacture other products and to provide goods and services. Some of the Company's products or ingredients are only available from a single approved source for manufacture. Any disruption to the supply chain for any of the Company's products may result in the Company being unable to continue marketing or developing a product or may result in the Company being unable to do so on a commercially viable basis for some period of time.***

The Company sources some products from third party contract manufacturers, and for certain products has its own manufacturing capability. Although the Company dual-sources certain key products and/or active ingredients, the Company currently relies on a single source for production of the final drug product for each of ADDERALL XR, CINRYZE, FIRAZYR, FOSRENOL, INTUNIV, LIALDA, PENTASA, and RESOLOR, relies on a single active ingredient source for each of ELAPRASE, FIRAZYR, FOSRENOL, INTUNIV, REPLAGAL, RESOLOR and VPRIV (in the US) and relies on limited third party sources to provide the donated human plasma necessary for the manufacture of CINRYZE.

The Company may experience supply failures or delays beyond its control if it does not, or if any of its third party manufacturers do not supply the Company on time with the required volumes, or supply products that

## 4. Principal risks and uncertainties

do not meet regulatory requirements. Any such supply failures could lead to significant delays, increase in operating costs, lost product sales, an interruption of research activities, or the delay of new product launches, all of which could have a material adverse effect on the Company's revenues, financial condition or results of operations.

The Company has also entered into many agreements with third parties for the provision of goods and services to enable it to manufacture its products. If these third parties are unable to manufacture products, or provide these goods and services, in each case in accordance with its respective contractual obligations, the Company's ability to manage its manufacturing processes or to operate its business, including to continue the development or commercialization of its products as planned or on a commercial basis, may be adversely impacted.

***The development, approval and manufacturing of the Company's products is subject to extensive oversight by various regulatory agencies and regulatory approvals or interventions associated with changes to manufacturing sites, ingredients or manufacturing processes could lead to significant delays, increase in operating costs, lost product sales, an interruption of research activities or the delay of new product launches.***

Pharmaceutical and device manufacturing sites must be inspected and approved by regulatory agencies such as the FDA, and similar agencies in other countries. Active ingredients, excipients and packaging materials used in the manufacturing process must be obtained from sources approved by regulatory agencies.

The development, approval and manufacturing of the Company's products depend on the ability to procure ingredients and packaging materials from approved sources and for the manufacturing process to be conducted at approved sites. Changes of manufacturer or changes of source of ingredients or packaging materials must generally be approved by the regulatory agencies, which will involve testing and additional inspections to ensure compliance with the applicable regulatory agency's regulations and standards. The need to qualify a new manufacturer or source of ingredients or packaging materials can take a significant amount of time. Should it become necessary to change a manufacturer or supplier of ingredients or packaging materials, or to qualify an additional supplier, the Company may not be able to do so quickly, or at all, which could delay or disrupt the manufacturing process.

US-based manufacturers must be registered with the DEA and similar regulatory authorities in other countries if they handle controlled substances. Certain of the Company's products, including ADDERALL XR and VYVANSE, contain ingredients which are controlled substances subject to quotas managed by the DEA. As a result, the Company's procurement and production quotas may not be sufficient to meet commercial demand.

CINRYZE, ELAPRASE, REPLAGAL and VPRIV are manufactured using highly complex biological processes. The complexity of the manufacturing results in a number of risks, including the risk of viral or other contamination. Additionally, CINRYZE is derived from human plasma, and is therefore subject to the risk of biological contamination inherent in plasma-derived products. The sole manufacturer of CINRYZE has received observations on Form 483 and a warning letter from the FDA identifying issues with respect to the manufacturing process for CINRYZE which must be addressed to the satisfaction of the FDA. Any regulatory interventions, in relation to these, or any other issues, if they occur, may delay or disrupt the manufacture of the Company's products.

The Company has made significant investments in a new biologics manufacturing plant at its site in Lexington, Massachusetts. The Company's ability to manufacture certain of its Rare Diseases products or constituents in this new facility remains subject to the approval of the facility by the FDA and other international agencies.

The failure to obtain regulatory approvals promptly or at all and/or regulatory interventions associated with changes to manufacturing sites, ingredients or manufacturing processes could lead to significant delays, an increase in operating costs, lost product sales, an interruption of research activities, the delay of new product launches or constraints on manufacturing output, all of which could have a material adverse effect on the Company's revenues, financial condition and results of operations.

## 4. Principal risks and uncertainties

***The actions of certain customers could affect the Company's ability to sell or market products profitably. Fluctuations in buying or distribution patterns by such customers can adversely impact the Company's revenues, financial conditions or results of operations***

A considerable portion of the Company's product sales are made to major pharmaceutical wholesale distributors, as well as to large pharmacies, in both the US and Europe. In 2013, for example, 52% of the Company's product sales were attributable to three customers in the US: McKesson Corp., Cardinal Health, Inc and AmerisourceBergen Corp. In the event of financial failure of any of these customers there could be a material adverse effect on the Company's revenues, financial condition or results of operations. The Company's revenues, financial condition or results of operations may also be affected by fluctuations in customer buying or distribution patterns. These fluctuations may result from seasonality, pricing, wholesaler inventory objectives, or other factors. A significant portion of the Company's revenues for certain products for treatment of rare genetic diseases are concentrated within a small number of customers. Changes in the buying patterns of those customers may have an adverse effect on the Company's revenues, financial condition or results of operations.

***Investigations or enforcement action by regulatory authorities or law enforcement agencies relating to the Company's activities in the highly regulated markets in which it operates may result in significant legal costs and the payment of substantial compensation or fines***

The Company engages in various marketing, promotional and educational activities pertaining to, as well as the sale of, pharmaceutical products and medical devices in a number of jurisdictions around the world. The promotion, marketing and sale of pharmaceutical products and medical devices is highly regulated and the operations of market participants, such as the Company, are closely supervised by regulatory authorities and law enforcement agencies, including the US Department of HHS, the FDA, the US Department of Justice, the SEC and the DEA. These authorities and agencies and their equivalents in countries outside the US have broad authority to investigate market participants for potential violations of laws relating to the sales, marketing and promotion of pharmaceutical products and medical devices, including the False Claims Act, the Anti-Kickback Statute and the Foreign Corrupt Practices Act, among others, for alleged improper conduct, including corrupt payments to government officials, improper payments to medical professionals, off-label marketing of pharmaceutical products and medical devices, and the submission of false claims for reimbursement by the federal government. Healthcare companies may also be subject to enforcement actions or prosecution for such improper conduct. Any inquiries or investigations into the operations of, or enforcement or other regulatory action against, the Company by such authorities could result in significant defense costs, fines, penalties and injunctive or administrative remedies, distract management to the detriment of the business, result in the exclusion of certain products, or the Company, from government reimbursement programs or subject the Company to regulatory controls or government monitoring of its activities in the future. The Company is subject to certain ongoing investigations by governmental agencies. For further information, see Note 19 to the consolidated financial statements).

***Adverse outcomes in legal matters and other disputes, including Shire's ability to enforce and defend patents and other intellectual property rights required for its business, could have a material adverse effect on the Company's revenues, financial condition or results of operations***

During the ordinary course of its business the Company may be involved in claims, disputes and litigation with third parties, employees, regulatory agencies, governmental authorities and other parties. The range of matters of a legal nature that might arise is extremely broad but could include, without limitation, employment claims and disputes, intellectual property claims and disputes, contract claims and disputes, product liability claims and disputes, regulatory litigation and tax audits and disputes.

Any unfavorable outcome in such matters could adversely impact the Company's ability to develop or commercialize its products, adversely affect the profitability of existing products, subject the Company to significant defence costs, fines, penalties, audit findings and injunctive or administrative remedies, distract management to the detriment of the business, result in the exclusion of certain products, or the Company, from government reimbursement programs or subject the Company to regulatory controls or government monitoring of its activities in the future. Any such outcomes could have a material adverse effect on the Company's revenue, financial condition or results of operations. (For further information see Note 19 to the consolidated financial statements).

## 4. Principal risks and uncertainties

***The Company faces intense competition for highly qualified personnel from other companies, academic institutions, government entities and other organizations. The Company is undergoing a corporate reorganization and the consequent uncertainty could adversely impact the Company's ability to attract and/or retain the highly skilled personnel needed for the Company to meet its strategic objectives***

The Company relies on recruiting and retaining highly skilled employees to meet its strategic objectives. The Company faces intense competition for highly qualified personnel and the supply of people with the requisite skills may be limited, generally or geographically. The range of skills required and the geographies in which they are required by the Company may also change over time as Shire's business evolves. The Company's ongoing One Shire reorganization, which aims to simplify the Company's organizational structure, involves changes to, and geographic relocation of, certain skilled roles. If the Company is unable to retain key personnel or attract new personnel with the requisite skills and experience, it could adversely affect the implementation of the Company's strategic objectives and ultimately adversely impact the Company's revenues, financial condition or results of operations.

***Failure to achieve the Company's strategic objectives with respect to the acquisition of ViroPharma may adversely affect the Company's financial condition and results of operations***

On January 24, 2014, Shire completed the acquisition of ViroPharma for a total cash consideration of approximately \$4.2 billion. Acquisitions of this size typically entail various risks, which, if they materialize, may adversely impact the Company's revenues, financial condition or results of operations.

These risks include but are not limited to:

- failure to achieve the targeted growth and expected benefits of the acquisition if sales of ViroPharma products, including CINRYZE, are lower than anticipated;
- difficulties in integrating ViroPharma into Shire may lead to the combined company not being able to realize the expected operating efficiencies, cost savings, revenue enhancements, synergies or other benefits in the timeframe anticipated, or at all;
- undiscovered or unanticipated risks and liabilities, including legal and compliance related liabilities, may emerge after closing the acquisition or may be higher than anticipated; and
- the Company may not be able to retain the existing customers of ViroPharma or attract new customers.

Any failure to achieve the Company's strategic objectives with respect to the ViroPharma acquisition could result in slower growth, higher than expected costs, the recording of asset impairment charges and other actions which could adversely affect the Company's business, financial condition and results of operations.

### **GENERAL RISK FACTORS RELATED TO THE COMPANY AND TO THE HEALTHCARE INDUSTRY**

***The actions of governments, industry regulators and the economic environments in which the Company operates may adversely affect its ability to develop and profitably market its products***

The healthcare industry is heavily regulated. Changes to laws or regulations impacting the healthcare industry, in any country in which the Company conducts its business, may adversely impact the Company's revenues, financial condition or results of operations. For example, changes to the regulations relating to the exclusivity periods available for the Company's products may allow for the earlier entry of generic or biosimilar competitor products.

***A slowdown of global economic growth, or continued instability of the Eurozone, could have negative consequences for the Company's business and increase the risk of non-payment by the Company's customers***

Growth of the global pharmaceutical market has become increasingly tied to global economic growth. Accordingly a substantial and lasting slowdown of the global economy or major national economies could negatively affect growth in the markets in which the Company operates. Such a slowdown, or any resultant austerity measures adopted by governments in response to a slowdown, could also reduce the level of reimbursement that governments are willing and able to provide to the Company for its products and, as a result, adversely affect the Company's revenues, financial condition or results of operations.

## 4. Principal risks and uncertainties

Any slowing economic environment may also lead to financial difficulties for some of the Company's significant customers. In such situations, the Company could experience delays in payment or non-payment of amounts owed which may result in a rising level of contractual defaults by its contractual counterparties.

The Company does business, both directly (with government hospitals, clinics, pharmacies and other agencies) and indirectly (through wholesalers and distributors), with a number of Eurozone governments, including the governments of Greece, Ireland, Italy, Portugal and Spain. These and other countries have experienced, and may continue to experience, declines in their creditworthiness. These events could in turn result in these countries making significant cuts to their public spending, including national healthcare budgets, in an attempt to manage their budget deficits, or could result in a greater risk of default or non-payment of outstanding payment obligations, any of which could adversely affect the Company's revenues, financial condition or results of operations.

In addition, concerns have been expressed for the overall stability and suitability of the Euro as a single currency, given the economic and political challenges facing individual Eurozone countries. Continuing deterioration in the creditworthiness of Eurozone countries, the withdrawal of one or more member countries from the EU, or the failure of the Euro as a common European currency could adversely affect the Company's revenues, financial condition or results of operations.

### ***The introduction of new products by competitors may impact future revenues***

The pharmaceutical, biotechnology and device industries are highly competitive and are characterized by substantial investment in continuous product development and technological change. The Company's products could, therefore, be rendered obsolete or uneconomic, through the development of new products, new methods of treatment, or technological advances in manufacturing or production by its competitors which may impact future revenues.

### ***The successful development of products is highly uncertain and requires significant expenditures and time***

Products that initially appear promising in research or development may be delayed or fail to reach later stages of development as:

- preclinical or clinical tests may show the product to lack safety or efficacy;
- delays may be caused by slow enrolment in clinical studies; regulatory requirements for clinical trial drug supplies; extended length of time to achieve study endpoints; additional time requirements for data analysis or dossier preparation; time required for discussions with regulatory agencies, including regulatory agency requests for additional preclinical or clinical data; delays at regulatory agencies due to staffing or resource limitations; analysis of or changes to study design; unexpected safety, efficacy, or manufacturing issues; delays may arise from shared control with collaborative partners in the planning and execution of the product development, scaling of the manufacturing process, or getting approval for manufacturing;
- manufacturing issues, pricing or reimbursement issues, or other factors may render the product economically unviable;
- the proprietary rights of others and their competing products and technologies may prevent the product from being developed or commercialized; or
- the product may fail to receive necessary regulatory approvals.

Success in preclinical and early clinical trials does not ensure that late stage clinical trials will be successful. Clinical results are frequently susceptible to varying interpretations that may delay, limit, or prevent regulatory approvals. The length of time necessary to complete clinical trials and to submit an application for marketing approval for a final decision by a regulatory authority varies significantly and may be difficult to predict. If the Company's large-scale or late-stage clinical trials for a product are not successful, the Company will not recover its substantial investments in that product.

In addition, even if the products receive regulatory approval, they remain subject to ongoing regulatory requirements, including, for example, obligations to conduct additional clinical trials or other non-clinical testing, changes to the product label (which could impact its marketability and prospects for commercial

## 4. Principal risks and uncertainties

success), new or revised requirements for manufacturing, written notifications to physicians, or product recalls or withdrawals.

### ***The failure of a strategic partner to develop and commercialize products could result in delays in development, approval or loss of revenue***

The Company enters into strategic partnerships with other companies in areas such as product development, manufacturing, sales and marketing. In these partnerships, the Company is sometimes dependent on its partner to deliver results. While these partnerships are governed by contracts, the Company may not exercise direct control. If a partner fails to perform or experiences financial difficulties, the Company may suffer a delay in the development, a delay in the approval or a reduction in sales, or royalties of a product.

### ***The failure to secure new products or compounds for development either through in-licensing, acquisition or internal research and development efforts, or the failure to realize expected benefits from acquisitions of businesses or products, may have an adverse impact on the Company's future results***

The Company's future results will depend, to a significant extent, upon its ability to develop, in-license or acquire new products or compounds, or to acquire other businesses. The expected benefits from acquired products, compounds or businesses may not be realized or may require significantly greater resources and expenditure than originally anticipated. The failure to realize expected benefits from acquisitions of businesses or products including those resulting from integration into the Group, or the failure to develop, in-license or acquire new products or compounds on a commercially viable basis, could have a material adverse effect on the Company's revenues, financial condition or results of operations.

### ***The Company may fail to obtain, maintain, enforce or defend the intellectual property rights required to conduct its business***

The Company's success depends upon its ability and the ability of its partners and licensors to protect their intellectual property rights. Where possible, the Company's strategy is to register intellectual property rights, such as patents and trademarks. The Company also relies on various trade secrets, unpatented know-how and technological innovations and contractual arrangements with third parties to maintain its competitive position. The failure to obtain, maintain, enforce or defend such intellectual property rights, for any reason, could allow third parties to make competing products or impact the Company's ability to develop, manufacture and market its own products on a commercially viable basis, or at all, which could have a material adverse effect on the Company's revenues, financial condition or results of operations.

The Company intends to enforce its patent rights vigorously and believes that its commercial partners, licensors and third party manufacturers intend to enforce vigorously those patent rights they have licensed to the Company. However, the Company's patent rights, and patent rights that the Company has licensed, may not provide valid patent protection sufficiently broad to prevent any third party from developing, using or commercializing products that are similar or functionally equivalent to the Company's products or technologies. These patent rights may be challenged, revoked, invalidated, infringed or circumvented by third parties. Laws relating to such rights may in future also be changed or withdrawn.

Additionally, the Company's products, or the technologies or processes used to formulate or manufacture those products may now, or in the future, infringe the patent rights of third parties. It is also possible that third parties will obtain patent or other proprietary rights that might be necessary or useful for the development, manufacture or sale of the Company's products. The Company may need to obtain licenses for intellectual property rights from others and may not be able to obtain these licenses on commercially reasonable terms, if at all.

The Company also relies on trade secrets and other un-patented proprietary information, which it generally seeks to protect by confidentiality and nondisclosure agreements with its employees, consultants, advisors and partners. These agreements may not effectively prevent disclosure of confidential information and may not provide the Company with an adequate remedy in the event of unauthorized disclosure. In addition, if the Company's employees, scientific consultants or partners develop inventions or processes that may be applicable to the Company's products under development, such inventions and processes will not necessarily become the Company's property, but may remain the property of those persons or their employers.

The Company has filed applications to register various trademarks for use in connection with its products in various countries and also, with respect to certain products, relies on the trademarks of third parties. These

#### 4. Principal risks and uncertainties

trademarks may not afford adequate protection or the Company or the third parties may not have the financial resources to enforce their rights under these trademarks which may enable others to use the trademarks and dilute their value.

In the regular course of business, the Company is party to litigation or other proceedings relating to intellectual property rights. (See Note 19 to the consolidated financial statements for details of current patent litigation).

***If a marketed product fails to work effectively or causes adverse side effects, this could result in damage to the Company's reputation, the withdrawal of the product and legal action against the Company***

Unanticipated side effects or unfavorable publicity from complaints concerning any of the Company's products, or those of its competitors, could have an adverse effect on the Company's ability to obtain or maintain regulatory approvals or successfully market its products.

The testing, manufacturing, marketing and sales of pharmaceutical products and medical devices entails a risk of product liability claims, product recalls, litigation and associated adverse publicity. The cost of defending against such claims is expensive even when the claims are not merited. A successful product liability claim against the Company could require the Company to pay a substantial monetary award. If, in the absence of adequate insurance coverage, the Company does not have sufficient financial resources to satisfy a liability resulting from such a claim or to fund the legal defense of such a claim, it could become insolvent. Product liability insurance coverage is expensive, difficult to obtain and may not be available in the future on acceptable terms.

Although the Company carries product liability insurance when available, this coverage may not be adequate. In addition, it cannot be certain that insurance coverage for present or future products will be available. Moreover, an adverse judgment in a product liability suit, even if insured or eventually overturned on appeal, could generate substantial negative publicity about the Company's products and business and inhibit or prevent commercialization of other products.

## 5. Directors' responsibility statement

The following responsibility statement is repeated here solely for the purpose of complying with DTR 6.3.5. This statement relates to and is extracted from page 94 of the 2013 Annual Report.

These responsibilities are for the full 2013 Annual Report and not the extracted information presented in this announcement or otherwise.

The Directors confirm that to the best of their knowledge:

- the Financial Statements, prepared in accordance with accounting principles generally accepted in the United States of America, present fairly, in all material respects, the assets, liabilities, financial position and profit or loss of the Group and the undertakings included in the consolidation taken as a whole; and
- the Strategic report, includes a fair review of the development and performance of the business and the position of the Group and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face; and
- the Annual Report and financial statements, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the Company's performance, business model and strategy.

On behalf of the Board

Chief Executive Officer  
Flemming Ornskov  
February 24, 2014

Chief Financial Officer  
Graham Hetherington  
February 24, 2014

**The following are trademarks either owned or licensed by Shire plc or its subsidiaries, which are the subject of trademark registrations in certain territories, or which are owned by third parties as indicated and referred to in this document:**

ADDERALL XR<sup>®</sup> (mixed salts of a single entity amphetamine)  
CARBATROL<sup>®</sup> (carbamazepine extended-release capsules)  
CINRYZE<sup>®</sup> (C1 esterase inhibitor [human])  
DAYTRANA<sup>®</sup> (trademark of Noven Pharmaceutical Inc.)  
DERMAGRAFT<sup>®</sup> (trademark of Organogenesis, Inc.)  
ELAPRASE<sup>®</sup> (idursulfase)  
ELVANSE<sup>®</sup> (lisdexamfetamine dimesylate)  
FIRAZYR<sup>®</sup> (icatibant)  
FOSRENOL<sup>®</sup> (lanthanum carbonate)  
INTUNIV<sup>®</sup> (guanfacine extended release)  
LIALDA<sup>®</sup> (trademark of Nogra International Limited)  
MEZAVANT<sup>®</sup> (trademark of Giuliani International Limited)  
PENTASA<sup>®</sup> (trademark of Ferring B.V. Corp)  
REMINYL<sup>®</sup> (galantamine hydrobromide) (UK and Republic of Ireland) (trademark of Johnson & Johnson, excluding UK and Republic of Ireland)  
REPLAGAL<sup>®</sup> (agalsidase alfa)  
RESOLOR<sup>®</sup> (prucalopride)  
TYVENSE<sup>®</sup> (lisdexamfetamine dimesylate)  
VASCUGEL<sup>®</sup> (allogeneic aortic endothelial cells cultured in a porcine gelatin matrix [Gelfoam<sup>®</sup>] with cytokines, implanted)  
VPRIV<sup>®</sup> (velaglucerase alfa)  
VYVANSE<sup>®</sup> (lisdexamfetamine dimesylate)  
XAGRID<sup>®</sup> (anagrelide hydrochloride)  
ZEFFIX<sup>®</sup> (trademark of GSK)  
3TC<sup>®</sup> (trademark of GSK)