What science can do

AstraZeneca Annual Report and Form 20-F Information 2015
Chief Executive Officer’s Review

2015 was an exceptional year for AstraZeneca as we made significant progress in meeting both our near- and longer-term strategic goals. Building on the solid foundations of the previous two years, our success during 2015 was based on a strong commitment to our values. It was this focus that made the year a great one for science and patients.

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The first stage of our strategic journey involved strengthening our product pipeline and building our Growth Platforms. We are now well into the second stage of that journey, as we manage a transitional period of patent expiries, and are on track to continue driving our Growth Platforms and launch our new products.

The increased momentum we built in 2015 was exemplified by a number of developments towards the end of the year in each of our main therapy areas that will help deliver our strategy.

Leadership in Oncology
The first of those events was the approval in November of Tagrisso in the US. This approval marks a significant milestone in AstraZeneca’s journey, and in our leadership in Oncology. Tagrisso is the first treatment approved for patients with a very specific form of non-small cell lung cancer who present with a genetic mutation in the epidermal growth factor receptor but also have a secondary mutation, T790M. Its story is remarkable and, as shown over, it demonstrates our ability to successfully deliver our pipeline and, even more importantly, offer patients a new treatment option in a disease where very few solutions exist.

Another significant development in Oncology came with our agreement in December to invest in a majority equity stake in Acerta Pharma, a company focused on haematology which represents a natural fit with our existing Oncology pipeline. The acquisition provides us with access to acalabrutinib (ACP-196), a potential best-in-class small molecule oral BTK inhibitor, which is expected to transform the treatment landscape for B-cell malignancies, the most common forms of blood cancers, and has potential in solid tumours and autoimmune diseases.

The acquisition of Acerta Pharma will also reinforce our growing position in haematology – building on our agreement with Celgene, in April, to develop durvalumab across a range of blood cancers.

Innovation in Cardiovascular and Metabolic diseases
Also in December, we completed our acquisition of ZS Pharma. This transaction provides access to the potassium-binding compound ZS-9, a potential best-in-class treatment for hyperkalaemia (high potassium levels in the bloodstream). The acquisition represents a good fit with our pipeline and portfolio in Cardiovascular and Metabolic diseases (CVMD), which focuses on reducing morbidity, mortality and organ damage by addressing multiple risk factors across cardiovascular disease, diabetes and chronic kidney disease.

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Transforming Respiratory treatment
Another development in December, was our agreement to acquire Takeda’s core respiratory business. When completed, this agreement will expand our ownership of rights to roflumilast (Daliresp/Daxas), the only approved oral PDE4 inhibitor for the treatment of COPD. The agreement builds on our acquisition from Actavis, in March, of the rights to market Daxas in the US. This important agreement will also provide us with access to other marketed medicines that complement our growing portfolio. Importantly, it will support our return to growth after 2017 and our goal to transform the way respiratory disease is treated.

Achieve scientific leadership
In addition to these developments, in the week before Christmas, we received our sixth approval for the year from the FDA. Subsequently, in February 2016, we received approval from the EU for Tagrisso for lung cancer.

However, in what was a very busy and successful year, my Review can only give a flavour of what we achieved. The 2015 Strategic priorities overview, shown on the right, lists some of our other achievements, as well as the challenges we faced. All these are explored in more detail throughout our Strategic Report.

So far as achieving scientific leadership is concerned, one measure of the distance we have come is in the recognition we have received through ‘high-impact’ publications in major relevant scientific journals. AstraZeneca people had 58 such articles published in 2015 compared with seven in 2010 – a more than eightfold increase.

2015 Strategic priorities overview

Achieve scientific leadership
> 6 approvals of NMEs or major LCM projects in major markets
  - Oncology: Iressa (US); Tagrisso (AZD9291/osimertinib) (US); Faslodex 500mg (China)
  - CVMD: Bydureon Dual Pen (Japan);
  - RIA: Zanamivir (US)
> 2 Phase III NME starts:
  - anifrolumab for lupus
  - PT010 for COPD
> 12 NME or major LCM regulatory submissions in major markets
> Accelerated reviews included
  - Brilinta FDA granted Priority Review for PEGASUS
  - Tagrisso FDA and PMDA granted Priority Review. EMA accelerated assessment
  - FDA granted Fast Track status for anifrolumab for systemic lupus erythematosus; durvalumab for head and neck cancer; and tremelimumab for mesothelioma
> 20 projects discontinued

Return to growth
> 1% increase in Total Revenue
to $24,708 million at CER; comprising Product Sales of $23,641 million (down 1%) and Externalisation Revenue of $1,067 million (up 140%)
  - Based on actual exchange rates, Total Revenue declined by 7%, reflecting the particular weakness of key trading currencies against the US dollar
> 11% increase in Growth Platforms revenue contributing 57% of Total Revenue
  - Respiratory: up 7%, before completion of the acquisition of Takeda’s respiratory business
  - Brilinta/Brilique: up 44% underpinned by a recently-extended US label and positive CHMP opinion
  - Diabetes: up 26%, including 76% in Emerging Markets; global Forxiga/Forxiga growth of 137% 
  - Emerging Markets: up 12%, including China and Latin America each growing by 15%
  - Japan revenue: up 4%
  - New Oncology: contributed $119 million, comprising Lynparza, Iressa (US) and Tagrisso
> US revenue was down 6% to $9,474 million; Europe down 6% to $5,323 million; and Established ROW was stable at $3,022 million (at CER)
Chief Executive Officer’s Review continued

A pipeline ahead of plan
Our pipeline is also a measure of our progress and 2015 was a year of considerable success. Of our six approvals for the year, the approval, in September, of Brilinta in the US for the treatment of patients with a history of heart attack beyond the first year was particularly impressive: it took just nine months to move from the presentation of top-line PEGASUS TiMI-54 data to launch.

During the year we also made 12 major regulatory submissions. After our partner Amgen decided to terminate our collaboration on brodalumab in May, our subsequent collaboration with Valeant, with their specific expertise in dermatology, enabled submissions to be made in the US and EU by the end of the year. In July, results of a Phase III study for selumetinib did not meet its primary endpoint for uveal melanoma. As for saxagliptin/dapagliflozin, its submission in the EU and elsewhere remains on track despite a Complete Response Letter being received from the FDA in October.

External recognition of the strength of our pipeline was provided by the number of accelerated reviews received by our candidate drugs during the year, including those for cancer, respiratory diseases and lupus. Internally, six Phase III investment decisions and 11 Phase II starts stand testament to the quality of the projects in development which will help deliver sustainable growth.

Even after the approvals we received during the year, and the 18 approvals of the last two years, we ended 2015 with 15 projects in late-stage development, including recently acquired compounds. This exceeds the target set in 2013 of nine to 10 NMEs in Phase III/pivotal Phase II studies or under regulatory review by 2016.

Collaboration as a way of life
2015 was also a good year for collaborations which are an integral part of our business model and culture. They improve the productivity of our R&D and help maximise the value of our pipeline. With 10 deals we considerably exceeded our target. Some of these, such as our agreement with Celgene, are examples of strategic collaborations to broaden and accelerate the development of key pipeline assets. This is explained in more detail in the Business model on page 8.

As well as externalising some of our early development projects outside our main therapy areas, we also divest medicines that can be better deployed by a partner with a primary focus in that area. Examples in 2015 included the divestment of Entocort, our gastrointestinal medicine. Both routes allow us to leverage the capabilities and expertise of others, focus our own resources and deliver the greatest benefit to patients and shareholders.

Scientific collaborations also help us push the boundaries of science. For example, during the year we announced four collaborations aimed at harnessing the power of CRISPR (clustered regularly-interspaced short palindromic repeats), including one with The Wellcome Trust Sanger Institute in Cambridge, UK – see over.
Values in action: We follow the science
Genetic engineering is not new. The Human Genome Project produced a complete genetic blueprint for building a human in 2003 but, until now, scientists have been unable to manipulate genes simply and effectively. A new technology called CRISPR is changing that by allowing the genome of several different species to be edited precisely. We are using CRISPR to identify new targets for medicines and develop new models to test compounds which align more closely with human disease.

Return to growth
We delivered a strong pipeline and financial performance in 2015 as we began the next phase in our strategic journey. As the 2015 Strategic priorities overview shows, Total Revenue in 2015 was up 1% at CER. The overview also shows the success we have had with our Growth Platforms where Product Sales grew by 11% and represented 57% of Total Revenue.

Our top-line and gross-margin growth underpinned continued investment in R&D. Core R&D costs were up by 21% in the year which reflected the investment in the pipeline.

Investing in China for the long term
The extent of our ambition was demonstrated by our strategic investments, announced in December, to accelerate the delivery of innovative medicines to patients in China, the world’s second largest economy and our second largest market, and to support the delivery of our strategy.

These initiatives will see AstraZeneca become the first multinational pharmaceutical company operating in China to commit to local development of its innovative global portfolio from research to commercialisation. Just as importantly, these initiatives will allow us to better integrate Chinese requirements into our global portfolio decisions.

Great place to work
Great people are central to our success and being a great place to work is at the heart of our efforts to release the talents of our employees. So, for example, during 2015, we held over 70 People Development Week events to help our staff take ownership of their personal development. A talented workforce is also diverse and I am pleased that we managed to exceed our targets for women and country of origin among our senior leaders. I take pride in the fact that our efforts are being increasingly recognised in external awards for the work environment we have instilled.

That environment is nurtured by our investment in strategic R&D centres, such as Cambridge, UK where we now have more than 1,600 employees and where the construction of our R&D centre and global headquarters is progressing rapidly. These investments help create an environment of innovation and a focus on science and patients. They also attract a lot of talent from academia and other companies.

A great place to work also has to be one where we do the right thing – for the patients who take our medicines, as well as the planet and society as a whole. If we are to deliver business success over the longer term, then sustainability has to be in our DNA. As the Chairman outlines in more detail in his Statement, the steps we are taking in this regard reflect a determination to do our fair share.

Looking ahead
The investments we made in 2015 were designed to ensure we achieved a balance between meeting our short-term goal of returning to growth and then delivering sustainable growth over the longer term as we build a sustainable, durable and more profitable business.

As we face the transitional period of patent expiry for Crestor in the US, we’re confident that our strong execution on strategy, combined with the benefits of focused investments and new launches, keeps us on track to return to sustainable growth in line with our targets. The weakness of key trading currencies against the US dollar has continued. Based on average exchange rates in January 2016 and our published currency sensitivities, an adverse impact of around 3% from currency movements on Total Revenue and Core EPS in 2016 would be anticipated.

Appreciation
I am confident that in AstraZeneca we have the people who can overcome our short-term challenges and deliver longer-term sustainable growth. In that regard I would particularly like to welcome Pam Cheng and Sean Bohen who joined us during the year. In doing so, I would like to thank David Smith and Briggs Morrison whom Pam and Sean replaced, for the contributions they made to our strategic journey.

In closing, I would like to pay tribute to everyone in AstraZeneca for making 2015 a tremendous year. I have every confidence in their ability to continue that success in the years ahead.

Pascal Soriot
Chief Executive Officer