

# What science can do

AstraZeneca Annual Report and Form 20-F Information 2017



## Chief Executive Officer's Review

While Total Revenue declined over the year, it rose in the last quarter of 2017, a sign of how we are steadily turning a corner.



“2017 represented a defining year for AstraZeneca. 2018 will be equally important...”

After experiencing the falling revenues of recent years, as some of our best-selling medicines lost exclusivity, our revenues improved over the course of 2017. Strong commercial execution helped us bring our science to more patients, making the most of our exciting pipeline. We made encouraging progress in all main therapy areas and delivered strong growth in China, our second largest market.

### Strategic progress

In my Review for 2017, I would therefore like to pay tribute to our achievements and look more closely at five medicines we launched during the year that bring both very real benefits to patients and underpin our future growth. I also want to consider some of the challenges we face as we work to realise the full potential of our medicines and ensure we deliver our science to patients around the world.

The strategy we set ourselves in 2013 was based on three pillars. We wanted to:

- > Achieve Scientific Leadership
- > Return to Growth
- > Be a Great Place to Work

### Achieving scientific leadership

In the five years since then, we have launched 13 new molecular entities (NMEs), including four alone in 2017. And, in 2017, we brought those medicines to more people with 19 major regional approvals – a new AstraZeneca record. It is an indicator of our scientific leadership in our three chosen therapy areas that we published 82 manuscripts in ‘high-impact’ scientific publications compared to 75 in 2016, and just seven in 2010. We are well on our way to meeting our longer-term goals of delivering one or more NMEs annually and sustainably delivering two NMEs annually by 2020.

### Returning to growth

Between 2011 and 2017, Product Sales in Established Markets of our very successful older products that have lost exclusivity reduced by more than \$13 billion (after taking into account currency movements). We expect to lose a further \$1 billion of Product Sales in 2018, in particular through the loss of exclusivity for *Crestor* in Europe and Japan. Overall, Total Revenue declined by 2% in 2017. As shown in the table overleaf, Product Sales declined by 5% from \$21,319 million to \$20,152 million, including a decline in *Crestor* sales of \$1,036 million and *Seroquel XR* sales of \$403 million.

But now, a new AstraZeneca is emerging from those headwinds, helped by our Growth Platforms, which gathered momentum during the year and grew by 5% (6% at CER). They now represent 68% of Total Revenue.

As well as launching five medicines last year, we continued to unlock more uses for existing treatments, including for *Lynparza* and *Tagrisso*. In addition, *Brilinta/Brilique* and *Farxiga/Forxiga*, by bringing benefits to millions of patients, each exceeded \$1 billion in annual sales for the first time.

Externalisation Revenue in 2017 increased by 37% (38% at CER) to \$2,313 million. Particularly significant was our global strategic oncology collaboration with MSD to co-develop and co-commercialise *Lynparza* for multiple cancer types. We will also jointly with MSD develop and seek to commercialise our MEK inhibitor selumetinib, currently being developed for multiple indications, including thyroid cancer.

19

19 NME and major LCM regional approvals

68%

Five Growth Platforms represent 68% of Total Revenue

5

Five significant launches from each of our three therapy areas

“Our future depends, however, not only on the number of projects but the quality of our science...”

#### Global Product Sales by therapy area

	2017			2016			2015		
	Sales \$m	Actual growth %	CER growth %	Sales \$m	Actual growth %	CER growth %	Sales \$m	Actual growth %	CER growth %
Oncology	4,024	19	19	3,383	20	20	2,825	(7)	7
Cardiovascular & Metabolic Diseases	7,266	(10)	(10)	8,116	(14)	(13)	9,489	(3)	4
Respiratory	4,706	(1)	(1)	4,753	(5)	(3)	4,987	(2)	7
Other Disease Areas	4,156	(18)	(17)	5,067	(20)	(19)	6,340	(23)	(16)
<b>Total</b>	<b>20,152</b>	<b>(5)</b>	<b>(5)</b>	<b>21,319</b>	<b>(10)</b>	<b>(8)</b>	<b>23,641</b>	<b>(9)</b>	<b>(1)</b>

#### Being a great place to work

As I talk to our employees around the world, whether in our labs, offices or on the road with our sales teams, I am constantly reminded that our achievements are only made possible by a skilled and talented team who live our Values and are true to our Purpose.

It is they who are transforming AstraZeneca: exploring new ways of working; improving productivity; and embracing new technology. The culture we are creating is aimed at releasing the talents of our people and enabling science to thrive. We know there is more we can do but we are simplifying how we work; improving diversity to reflect the world and societies in which we work; and increasing our focus on sustainability. Like the Chairman, I am particularly pleased to see the external recognition we are receiving for our sustainability activities. We also have cause to celebrate the start of our Healthy Lung Asia Programme, the third anniversary of our Healthy Heart Africa Programme and the seventh year of our Young Health Programme – a global disease prevention programme.

People at AstraZeneca know that scientific progress is best made when we take smart risks in following the science. We also know that sometimes means we experience setbacks. For example, in July, the initial results of the MYSTIC trial showed that *Imfinzi* in combination with tremelimumab for 1st line non-small cell lung cancer (NSCLC) did not meet the primary endpoint of progression-free survival (PFS). The study for overall survival (OS) continues. Following the Phase III programme results, we decided to discontinue the development of tralokinumab, an antibody in severe, uncontrolled asthma. Earlier in the year, we received a second Complete Response Letter from the FDA for ZS-9, a potential new medicine for hyperkalaemia, an important area of unmet medical need, and we continue to work towards its approval. Overall, however, the number of successes far outweighed the disappointments.

#### Delivering for patients

By way of example, five significant launches from each of our three main therapy areas in 2017 showed how our rebuilt pipeline is starting to deliver our science to patients.

*Imfinzi* (durvalumab) received accelerated approval from the FDA in May for the treatment of advanced bladder cancer. It was a significant moment both for patients who had limited treatment options and for us as it was our first immuno-oncology (IO) approval. *Imfinzi* is the cornerstone of our extensive IO programme, in development across many tumour types, both as monotherapy and with other medicines. Later in May, we announced positive top-line results for the Phase III PACIFIC trial as *Imfinzi* demonstrated superior PFS in patients with locally-advanced, unresectable NSCLC.

In October, the FDA granted accelerated approval of *Calquence* (acalabrutinib) as a treatment for relapsed or refractory mantle cell lymphoma (MCL). This represented another landmark for us as it was our first approval in blood cancer and was approved less than five months after its regulatory submission. With a development programme including more than 35 clinical trials in multiple blood cancers, the promise of *Calquence* is significant.

In February, the FDA approved *Qtern* (*Forxiga* 10mg and *Onglyza* 5mg fixed-dose combination) as an adjunct to diet and exercise to improve glycaemic control in adults with Type 2 diabetes who have inadequate control with *Forxiga* (10mg) or who are already treated with *Forxiga* and *Onglyza*.

Finally, in our Respiratory therapy area, *Bevespi Aerosphere* (glycopyrrolate and formoterol fumarate) was launched in the US for COPD, using, for the first time, our *Aerosphere* delivery technology that uses a pressurised metered-dose inhaler (pMDI).

*Fasenra* (benralizumab) was approved in November in the US for patients with severe asthma with an eosinophilic phenotype and is our first approved respiratory biologic medicine. It is a new anti-eosinophilic monoclonal antibody which has demonstrated efficacy versus placebo in pivotal clinical trials and is the first respiratory biologic with an eight-week maintenance dosing regimen.



can

Science

provide more options for patients with lung cancer

### Sustainable delivery

If our launches are delivering benefits to patients now, our pipeline is intended to ensure we deliver those benefits sustainably in the years to come. During 2017, we made 18 NME or life-cycle management regulatory submissions in major markets and approved nine Phase III investment decisions. These will provide plenty of news in 2018 as we await regulatory decisions and data read outs from clinical trials. Looking further ahead, we approved 14 NME Phase II starts or progressions in 2017 which will shape our future in the years to come.

Our future depends, however, not only on the number of projects in our pipeline but the quality of our science. In that regard, we are relentless in our search for the best science – whether it is in our own labs or those of others with whom we collaborate. For example, we are harnessing the power of genomics through global collaborations and scientific innovation with the aim of transforming drug discovery and development. Additionally, by focusing on quality rather than quantity, our IMED Biotech Unit has seen a four-fold increase in productivity, while costs have remained broadly unchanged.

### A great team

Great science needs great people, and great people need great teams if they are going to deliver their best work. I am therefore grateful to all my colleagues at AstraZeneca for their tremendous efforts in 2017. These efforts made it a defining year and continued to transform the organisation. I would also like to welcome three new members to the Senior Executive Team who joined during the year. Leon Wang

joined us in January with responsibility for our International Region. Iskra Reic joined in April with responsibility for Europe and David Fredrickson took over from Jamie Freedman in charge of the Oncology Business Unit in October. I welcome the skills, experience and diversity they bring to our discussions. All three were internal appointments and speak to the strength of our pipeline of talent.

### Looking ahead

2017 saw two more of our medicines each exceed \$1 billion in annual sales, five significant launches and more potential uses found for existing medicines. We remain committed to our progressive dividend policy. Our strategy is working, propelled by a strong pipeline, good sales performance and continued cost discipline.

2017 represented a defining year for AstraZeneca. 2018 will be equally important as we seek to deliver the full potential of our medicines and ensure we deliver our science to patients around the world.

I am excited about AstraZeneca's prospects as a science-led innovator as I believe we will deliver value for patients and shareholders in the long term.

**Pascal Soriot**  
Chief Executive Officer

### Imfinzi PACIFIC trial

Lung cancer accounts for about one quarter of all cancer deaths, more than any other cancer.

With the emergence of new targeted small molecules and immunotherapies, significant progress is being made in the treatment of patients for whom the disease has already spread through the body (metastatic). But for patients with an earlier stage disease, known as locally advanced unresectable non-small cell lung cancer (NSCLC), treatment options have been limited and clinical outcomes remain poor.

Aiming to provide solutions to those unmet medical needs, we have initiated a broad immuno-oncology development programme in NSCLC, using the immune system to treat the cancer, both in the locally advanced and metastatic settings. For patients with locally advanced NSCLC, where the tumour cannot be surgically removed, the current standard of care is concurrent chemoradiation therapy (CRT), followed by a period of active surveillance during which patients are monitored closely for progression. Although most patients with locally advanced disease initially respond to CRT, the vast majority will advance to metastatic disease within 12 months. In the Phase III PACIFIC clinical trial, *Imfinzi* demonstrated a statistically significant and clinically meaningful improvement in progression-free survival following CRT, and reduced the rate of distant metastasis formation. No other Phase III trial has demonstrated these results in more than two decades.