Cautionary statement regarding forward-looking statements

In order, among other things, to utilise the 'safe harbour' provisions of the US Private Securities Litigation Reform Act 1995, we are providing the following cautionary statement: This presentation contains certain forward-looking statements with respect to the operations, performance and financial condition of the Group. Although we believe our expectations are based on reasonable assumptions, any forward-looking statements, by their very nature, involve risks and uncertainties and may be influenced by factors that could cause actual outcomes and results to be materially different from those predicted. The forward-looking statements reflect knowledge and information available at the date of preparation of this presentation and AstraZeneca undertakes no obligation to update these forward-looking statements. We identify the forward-looking statements by using the words 'anticipates', 'believes', 'expects', 'intends' and similar expressions in such statements. Important factors that could cause actual results to differ materially from those contained in forward-looking statements, certain of which are beyond our control, include, among other things: the loss or expiration of patents, marketing exclusivity or trade marks, or the risk of failure to obtain patent protection; the risk of substantial adverse litigation/government investigation claims and insufficient insurance coverage; exchange rate fluctuations; the risk that R&D will not yield new products that achieve commercial success; the risk that strategic alliances and acquisitions will be unsuccessful; the impact of competition, price controls and price reductions; taxation risks; the risk of substantial product liability claims; the impact of any failure by third parties to supply materials or services; the risk of failure to manage a crisis; the risk of delay to new product launches; the difficulties of obtaining and maintaining regulatory approvals for products; the risk of failure to observe ongoing regulatory oversight; the risk that new products do not perform as we expect; the risk of environmental liabilities; the risks associated with conducting business in emerging markets; the risk of reputational damage; the risk of product counterfeiting; the risk of failure to successfully implement planned cost reduction measures through productivity initiatives and restructuring programmes; the risk that regulatory approval processes for biosimilars could have an adverse effect on future commercial prospects; and the impact of increasing implementation and enforcement of more stringent anti-bribery and anti-corruption legislation. Nothing in this presentation should be construed as a profit forecast.
Innovation and Growth

Our strategy

Pascal Soriot
Chief Executive Officer
Our vision

To be a **global biopharmaceutical business** delivering great medicines to patients through **innovative science** and **excellence** in development and commercialisation

- A science-led, innovation strategy
- Broad R&D platform focused on 3 core TAs
- Balanced portfolio of specialty and primary care products
- Global commercial presence, with strength in emerging markets
Our strategy remains focused on innovation…
...but with a different set of choices on how we execute

**Focus** our R&D and Commercial investments

**Prioritise & accelerate** promising assets and BD

**Transform** our innovation model and the way we work

BD = business development
AstraZeneca today...
AstraZeneca has strong foundations to build on

**Commercial Presence**

- Strength in primary care, cardiovascular, oncology, metabolism & respiratory
- Strong position in China & emerging markets
- Ahead of the curve in new commercial models

**Pipeline & Science**

- Unique combination of small molecules, biologics, immunotherapies, protein engineering
- Growing Phase II and an industry leading respiratory / inflammation pipeline
- Good underlying discovery science
...but faces a number of key challenges

- R&D productivity and Phase III delivery
- Market position and patent expiries
- Launch performance
- Cost structure
- Culture and ways of working
- Complexity and fragmentation
We are focused on returning to growth

Illustrative

Declining major brands

Internal Growth Platforms

Established portfolio

Business Development

Revenue vs. Time
Our path to success
A bold ambition with 3 key priorities

1. Achieve scientific leadership
2. Return to growth
3. Be a great place to work
1

Achieve scientific leadership

1. **FOCUS** on distinctive science in 3 core TAs
2. **PRIORITIZE & ACCELERATE** our pipeline
3. **TRANSFORM** our innovation culture & model
We will focus on distinctive science in 3 core therapy areas.

- Cardio-Metabolism
- Oncology
- Respiratory/inflammation

Core TAs

Opportunity-Driven

- Infection & Vaccines
- Neuroscience

Biologics | Small Molecules | Immuno-therapies | Protein engineering
We will prioritise investment in key assets and pull through promising phase II pipeline

- Immediately accelerate/invest into key NMEs and LCMs
- Pull-through promising Phase II pipeline with over 20 NMEs
- Moving forward: Focus resources behind our most promising assets

<table>
<thead>
<tr>
<th>Invest</th>
<th>Accelerate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesinurad</td>
<td>Sifalimumab / MEDI-546</td>
</tr>
<tr>
<td>Benralizumab</td>
<td>Tralokinumab</td>
</tr>
<tr>
<td>Olaparib</td>
<td></td>
</tr>
<tr>
<td>Moxetumomab</td>
<td>Selumetinib</td>
</tr>
</tbody>
</table>
A number of attractive opportunities in our pipeline

<table>
<thead>
<tr>
<th>Potential peak year sales for New Medicines</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over $1B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AZD5069</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>benralizumab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fostamatinib (2013)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEDI-551</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>olaparib (2013)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>selumetinib</td>
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<td>sifalimumab / MEDI-546</td>
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</tr>
<tr>
<td>tralokinumab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brodalumab¹ (2015)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lesinurad (2014)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>naloxegol (2013)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Up to $1B</td>
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<tr>
<td>AZD4547</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AZD6765</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>mavrilimumab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATM AVI</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CAZ AVI (2014)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>metreleptin (2013)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>moxetumomab</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Strength of evidence to date:
- **Low**
- **Medium**
- **High**

KEY: (20xx) Year in brackets represents planned year of regulatory submission

¹ Gross revenue – not AZ share for brodalumab

PYS includes lifecycle management opportunities
We will strengthen pipeline through R&D licensing, alliances & scientific partnering activity

• Greater intensity of academic and biotech alliances

• Prioritise licensing in oncology, respiratory/inflammation & CV metabolism

• Seek partnerships and bolt-on acquisitions
To ensure long term success we will transform our innovation culture and R&D model

<table>
<thead>
<tr>
<th></th>
<th>Create autonomous biotechs to drive science &amp; innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Increase emphasis on novel biology &amp; personalised healthcare</td>
</tr>
<tr>
<td>3</td>
<td>Increase proximity to bioscience clusters and co-locate around 3 strategic sites</td>
</tr>
</tbody>
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To ensure long term success we will transform our innovation culture and R&D model

1. Create autonomous biotechs to drive science & innovation
2. Increase emphasis on novel biology & personalised healthcare
3. Increase proximity to bioscience clusters and co-locate around 3 strategic sites
Increase proximity to bioscience clusters and co-locate around three strategic sites

1. Create autonomous biotechs to drive science & innovation
2. Increase emphasis on novel biology & personalised healthcare
3. Increase proximity to bioscience clusters and co-locate around 3 strategic sites

subject to consultation
Increase proximity to bioscience clusters and co-locate around three strategic sites

**Gaithersburg**
Co-locate around biologics/specialty care

Proximity to NIH, Johns Hopkins

**Cambridge**
Co-locate R&D in world-class science cluster

New site in Cambridge with close proximity to University of Cambridge and world class UK bioscience community

**Mölndal**
Leverage historical strength Respiratory and CV/Met

Connections to Karolinska Institute & Medicon Valley

subject to consultation
Return to growth

2

FOCUS on key growth platforms

ACCELERATE through business development

TRANSFORM through specialty care / biologics
We will focus on AZ growth platforms

1. Cardiovascular / Brilinta
   Establish scientific leadership, reset trajectory

2. Diabetes
   Maximise assets and alliance to become a leader

3. Emerging Markets
   Build on China strength and re-focus around innovative products

4. Respiratory
   Exploit “end to end” strengths in brands, pipeline, devices

5. Japan
   Maximise diabetes, Symbicort, Brilinta, Nexium, Crestor
We believe we can do better than consensus

<table>
<thead>
<tr>
<th></th>
<th>2018 Consensus estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brilinta</td>
<td>1.3</td>
</tr>
<tr>
<td>Diabetes</td>
<td>2.3</td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>7.6</td>
</tr>
<tr>
<td>Respiratory</td>
<td>3.7</td>
</tr>
<tr>
<td>Japan</td>
<td>2.3</td>
</tr>
<tr>
<td>Pipeline</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total revenues</strong></td>
<td><strong>21.5</strong></td>
</tr>
</tbody>
</table>

Values $bn. AZ Consensus Post Q4 2013. Japan value projected from previous proportion of Established ROW
Build biologics/specialty care potential to drive sustainable longer term growth

- On track for sustainable delivery of 1 BLA/year from 2016
- Convert strong biologics pipeline into future launches
- Create a balanced primary and specialty care product portfolio

Development Pipeline Today

- ~50% Biologics
- ~50% Small Molecules

Development (Phase I-III) pipeline today has grown to ~50% biologics

BLA = Biologics License Application
Be a great place to work

3

FOCUS on simplification of our business

DRIVE continued productivity improvements

EVOLVE our culture
A sound financial framework
Our Financial Objectives and Capital Allocation Policy

- **Drive on-market value**: 48-52% core pre-R&D margin
- **Reinvest for growth and value**: Reinvest up to 50% of on-market cashflow
- **Maintain progressive dividend**: Hold or Grow DPS; 2x Core EPS Cover
- **Fund value-enhancing business development & acquisitions**: Strategically aligned

---

Maintain strong Balance Sheet

- Target strong, investment grade
- Maintain operational cash balance
- Repurchase shares periodically
Business development activity will be a key focus

- **Research deals**
  Increase early stage Research deals and academic alliances

- **Peer collaborations**
  Seek 1-2 additional global partnerships beyond BMS and Amgen alliances

- **In-licensing and bolt-on acquisition**
  Pursue partnering and bolt-on acquisition that strengthens core TA portfolios

- **Transformative merger and acquisitions**
  Not a requirement nor priority focus for plan
Our value proposition to investors

“Pure play” Innovation

A focused on-market portfolio in 3 core TAs and a strong global commercial presence…

…combined with a distinctive R&D platform and a growing late stage pipeline…

…with disciplined capital allocation, and a commitment to a progressive dividend
Why AstraZeneca?

✓ Differentiated strategy
  Pure play innovation/science strategy combined with global commercial scale

✓ Growth levers
  Internal growth platforms can return the company to growth with focused BD/M&A acting as an accelerator

✓ Pipeline potential
  Promising phase II pipeline that will advance to a strong late stage portfolio by 2016

✓ Re-focused for delivery
  Refocused efforts on 3 core TAs, resources and BD/M&A efforts prioritised for growth and innovation

✓ Building for sustainability
  Bold steps being taken to transform R&D innovation model, culture and operating model

✓ Committed to shareholder returns
  Productivity improvement & commitment to dividend policy
Delivering on the potential of BRILINTA

Paul Hudson
Executive Vice President, North America
Our ambition
To grow BRILINTA to a multi $billion brand

2013
Lead ACS

2016
Best-in-class OAP

2020
Broaden OAP Use
Large OAP opportunity with double digit growth

Sales - $8.9 bn

- 55% USA
- 12% Japan
- 5% France
- 5% China
- 3% Germany
- 20% ROW

Volume

- 23% Stroke
- 16% Elective Stent
- 27% Post-ACS
- 14% PAD
- 20% ACS

CAGR '02-'12:
- 12.5% Sales
- 13.6% Volume

Source: IMS Health MIDAS; Kantar Health Epi Database; Millennium Research Group; AstraZeneca Global Forecasting Analysis

Note: This slide is necessarily forward looking and includes areas for which additional studies may be explored for the purpose of seeking additional indications or expanded labelling.

Note: OAP volume is based on days of therapy
BRILINTA saves more lives compared to clopidogrel in ACS

21% RRR in CV deaths

An estimated 100,000 more lives with 12 months of treatment saved every year

US plan to accelerate growth

Key actions

• Made securing preferred unrestricted access a priority
• Single minded focus on CV mortality
• ‘Up skilling’ of existing customer facing roles
• Dedicated expert resource across entire patient pathway
• Significant increase in investment
US plan to accelerate growth

Key actions

• Retail pharmacy promotion
• Launched ‘Access My BRILINTA’ programme
• Broader approach to contracting – Commercial and Medicare Part D
• Expand preferred unrestricted access to 80%
Result: US access has significantly improved

- **On Formulary***: 82% (from 56%)
- **Commercial Preferred**: 57% (from 21%)
- **Medicare D Preferred**: 57% (from 8%)

Source: iProfiler + RSM Hospital Formulary Updates; Fingertip Formulary
*Measured Mar 2012 vs Feb 2013
**Measured Mar 2012 vs Mar 2013
US plan to accelerate growth

Key actions

• Refocused organisation on CV mortality as core differentiator
• Executed a refocused promotional campaign in June
• Expansion of strategy and messaging to include benefits in acute setting
• Focus on troponin positive patients for physician trial
• 100% increase in brand investment
Results: Improved recall of CV mortality benefit

Source: Biovid ATU; Among interviewed interventional cardiologists, the % of unaided mentions where a given therapy is mentioned as the OAP providing the greatest mortality benefit”
Understanding the Patient Pathway

Organisation

Access & Affordability

Strategy & Messaging

Patient Pathway

- Chest Pain
- Ambulance
- Emergency room
- Cath lab / surgery
- Coronary care unit
- Primary care

Initial Treatment Decision

Discharge & Follow-Up
US plan to accelerate growth

Key actions

• Conducted in depth analysis of major patient touch points and decisions
• 20% increase in size of CV specialty team
• 40% increase in Cardiologists’ Share of Voice
• 3X number of Primary Care sales representatives
• Expanding call list to include Emergency Room physicians and discharge nurses
US plan to accelerate growth

Key Actions

- 30% increase in field based scientific staff including physicians
- 2X number of promotional speaker programmes
- 3X increase in the number of medical education programmes
- 20X increase in investigator initiated studies
- 5X increase in total medical support
Performance Improvement Since January

BRILINTA Retail NBRx

Source: IMS Health NPA Weekly; IMS Health NPA Market Dynamics (Retail Only)
Expectations from acceleration plan

- **2012**: Steady increase in TRx & NBRx
- **2H 2013**: Strong acceleration in TRx & NBRx trend
- **Q1 2014**: Material impact on financial performance
Launch learnings are resulting in success in RoW

Source: AstraZeneca Hospitals with Brilinta on protocols Tracker Study, December 2012
Our ambition – to grow Brilinta to a multi $billion brand

- **2013**
  - Lead ACS PLATO

- **2016**
  - Best-in-class OAP
  - PEGASUS, EUCLID, (Stroke)

- **2020**
  - Broaden OAP Use
Delivering on the potential of BRILINTA

Terry Ferguson
Vice President Global Medical Affairs Cardiovascular Therapeutic Area
Executive Director US Medical Affairs and Strategic Development
Why Focus on Troponin (+) Patients
Event Rates in Troponin (+) and (-) Patients in PLATO

hs-Tn (+) (> 14 ng/ml)

hs-Tn (-) (< 14 ng/ml)

Event Rate

CVD/MI/Stroke  |  CVD/MI  |  CVD  |  Total Death
--- | --- | --- | ---
0  | 3  | 6  | 9  | 12  | 15

Most guidelines now recommend low maintenance doses of aspirin.

Example: The ACCF/AHA/SCAI PCI Guidelines now say:

“After PCI it is reasonable to use ASA 81 mg in preference to higher maintenance doses.”

References:
2. FDA Briefing Documents, Published June 2010; page 83; accessed March 2013
The PARTHENON clinical development programme

2013: Lead ACS

2016: Best-in-class OAP

2020: Broaden OAP Use

ACS

PAD

Stroke

Range of planned and proposed life cycle management programmes

The PARTHENON programme will include 60,000+ patients

Note: This slide is necessarily forward looking and includes areas for which additional studies may be explored for the purpose of seeking additional indications or expanded labelling.
### PARTHENON and the current world of OAP Rx

<table>
<thead>
<tr>
<th></th>
<th>Incident ACS</th>
<th>Post ACS</th>
<th>PAD</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Invasive</td>
<td>Medical</td>
<td>1 – 3 yr</td>
<td>Funding committed; planning underway</td>
</tr>
<tr>
<td><strong>Brilinta</strong> (ticagrelor)</td>
<td>Label (PLATO)</td>
<td>Label (PLATO)</td>
<td>PEGASUS (Submit 2015)</td>
<td>EUCLID (Submit 2016)</td>
</tr>
<tr>
<td><strong>Plavix</strong> (clopidogrel)</td>
<td>Label</td>
<td>Label</td>
<td>No Label</td>
<td>Label (non-acute)</td>
</tr>
<tr>
<td><strong>Effient</strong> (prasugrel)</td>
<td>Label (TRITON)</td>
<td>No Label (TRILOGY)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other opportunities are being considered outside of traditional antiplatelet indications.


Note: This slide is necessarily forward looking and includes areas for which additional studies may be explored for the purpose of seeking additional indications or expanded labelling.
What does it takes to be successful?

**Needs**

- RWE Studies
- Registries
- HECON data

**Data**

- ISSs
- Preclinical Studies

**Outreach**

- ACC, AHA, ESC
- Primary Care
- Emergency Medicine
- Nursing
- Pharmacists
- Academic Groups
Our ambition – to grow *Brilinta* to a multi $billion brand

2013
Lead ACS PLATO

2016
Best-in-class OAP
PEGASUS, EUCLID, (Stroke)

2020
Broaden OAP Use

Note: This slide is necessarily forward looking and includes areas for which additional studies may be explored for the purpose of seeking additional indications or expanded labelling.
Return to growth
Diabetes

Ruud Dobber
Executive Vice President, Europe
Our objectives today

1. To highlight diabetes opportunity

2. To highlight the potential and performance of our unique Alliance portfolio

3. To highlight the initiatives we are taking to strengthen and accelerate our diabetes franchise
Diabetes is a growing global health emergency

Over 350M patients with diabetes globally today

...growing to over 550M by 2030

...up to 50% of all cases are undiagnosed

...2/3 of patients are living in emerging markets

AZ/BMS alliance offers the broadest innovative non-insulin anti-diabetic portfolio

1 2013, 2014 expected launch dates of products
Source: IMS Data February 2013, AZ analysis
We are present in the fastest growing classes

**Total market net sales, by class**

<table>
<thead>
<tr>
<th>Year</th>
<th>DPP-4</th>
<th>Insulin</th>
<th>SGLT-2</th>
<th>Other²</th>
<th>GLP-1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>2010</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>2012</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>2014</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>44</td>
</tr>
<tr>
<td>2016</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>2018</td>
<td>56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>56</td>
</tr>
</tbody>
</table>

**2012-2018 CAGR %**

- **24%**
- **79%¹**
- **27%**
- **5%**
- **-4%**

¹ CAGR for SGLT-2 is 2014-2018
² Includes SUs (sulphonylureas), TZDs (tiazolidinediones), metformin and other low revenue classes

Source: Decision Resources
We are present along the entire patient journey of a progressive disease

<table>
<thead>
<tr>
<th>Initial treatment</th>
<th>Add on to met</th>
<th>Multiple NIADs</th>
<th>Add on to Insulin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kombiglyze XR US²</td>
<td>Onglyza</td>
<td>Bydureon</td>
<td>Byetta exenatide injection</td>
</tr>
<tr>
<td>(saxagliptin and metformin HCl extended release tablets)</td>
<td>(saxagliptin 5 mg tablets)</td>
<td>(exenatide extended-release for injectable suspension)</td>
<td></td>
</tr>
</tbody>
</table>

1 Illustrative only. Intended to represent an example of common therapy progression and Current Target for physician use, not actual product indications.

2 Only Kombiglyze XR in the US is indicated for use in treatment naïve patients. NIADs = non insulin anti-diabetics
Onglyza franchise grew globally at 59% vs 36% for DPP-4 class

Onglyza family is consistently outperforming the market

Value growth (%)

<table>
<thead>
<tr>
<th></th>
<th>Onglyza (Value growth, %)</th>
<th>DPP-4 class (Value growth, %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>59</td>
<td>36</td>
</tr>
<tr>
<td>US</td>
<td>59</td>
<td>29</td>
</tr>
<tr>
<td>EU 5</td>
<td>49</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: IMS MIDAS Sales Data (Dec 2012)
US alliance team is stabilising Bydureon share and increasing prescriber base

- AZ/BMS sales forces US is three times larger than Amylin Sales force
- Start of active promotion in EU markets from April 2013

Market share development
Rx Share of GLP-1, Feb12-Feb13*, Percentage

-2%  +1.5%

Numbers of new prescribers
4-week average*

<table>
<thead>
<tr>
<th></th>
<th>Sep 12</th>
<th>Jan-Feb13</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBRx</td>
<td>380</td>
<td>511</td>
</tr>
<tr>
<td>NRx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRx</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: IMS LRx (Retail); SHA PHAST
*Data for week ending February 22, 2013. Prescriber base data for week ending February 8, 2013
NBRX = New to brand share (also known as Dynamic portion of the market)
NRx = NBRx + continuation requiring a new “piece of paper” Rx
TRx = New Rx plus refills (automatic refills)
Forxiga - launched in 3 countries, re-submission in the US mid 2013, early positive signs

Weekly sales data shows strong uptake
PDOT* volume, IMS sell out, number of weeks after launch

Launch and Reimbursement status in other countries

- Launched in **Germany, UK, Denmark**
- Decision of GBA (**Germany**) and NICE (**UK**) pending
- Re-submission in the **US** mid 2013

*Source: IMS Sell out. PDOT (patient days on therapy), one PDOT = one tablet for both Forxiga and Januvia
Considerable SGLT-2 opportunity in Japan

NIAD Volume in Japan, 2012 PDOT (M)

- DPP-4i: 949
- GLP-1: 17

NIAD 2012 Growth Rates (%) in Japan, volume

- DPP-4i: 72
- GLP-1: 62

Source: IMS Health MIDAS
PDOT = Patient Days of Therapy
NIAD = non insulin anti-diabetic
Activities to strengthen and accelerate our growth

**Strengthening scientific leadership**

**SAVOR**
First DPP-4 CV outcome study in Diabetes

**DECLARE**
Dapagliflozin CV outcome study

**EXSCEL**
Bydureon CV outcome study

**Simplify regimen**

Kombiglyze XR (US)
Komboglyze IR (EU)

Saxagliptin + Dapagliflozin

Dapagliflozin + Metformin

Onglyza + Statin
pending SAVOR results

**Accelerate**

Dual chamber pen

Exenatide once weekly & once monthly suspensions with auto-injector

Bydureon: Label extensions

---

1 Currently being evaluated
Source: Internal data
Strengthening the AZ/BMS alliance

- One US commercial team
- Integrated model: avoiding duplication of structures and drives synergies
- Single team drives stronger leadership
- Simplified decision making
- Under evaluation

Source: Internal data
Upcoming major events in the next years

- **Topline results from SAVOR Mid-Year 2013**
- **Forxiga/Metformin FDC FDA Filing 2H 2013**
- **Estimated study completion date for EXSCEL 2017**
- **Onglyza/Forxiga FDC Filing US, EU 2015**
- **Forxiga Filing Japan 1Q 2013**
- **Forxiga Filing China 1Q 2013**
- **Forxiga US Re-filing mid 2013**
- **Bydureon dual chamber pen: US filing 3Q 2013**
- **Onglyza/Forxiga FDC Filing China 1H 2014**

Source: Internal data, clinicaltrials.gov
Summary

• Diabetes is a huge and fast growing opportunity with over half a billion patients worldwide by 2030

• AZ/BMS Alliance uniquely poised with differentiated non-insulin anti-diabetic portfolio

• Effective execution of our plan with further clinical data pending can accelerate our strong performance
Emerging Markets

Mark Mallon
Executive Vice President, International
AZ Emerging Markets – A platform for success

6th fastest growing MNC pharma player across Emerging Markets

~$6bn sales in Emerging Markets

Source: Internal 2012 Ex Factory Sales / IMS
A history of broad based, profitable growth

AZ Emerging Markets Net Sales
($bn, CER annual growth rate)

Notes: Sales at actual exchange rate.
Source: AZ internal
Aggressively addressing factors slowing growth

Factors impacting 2011 and 2012 growth:

- Changes in management and organization in China in 2011
- Supply issues globally and in India
- LoE in major LatAm markets and price cuts in select markets

1. China organization stabilised – accelerating growth in the second half of 2012
2. Supply issues addressed in Sweden and India
3. Introduction of New Emerging Market Strategy
Our ambition – high single digit growth platform

AZ Emerging Markets Quarterly Sales Growth Rates (% at CER)

Back on growth path since Q3 2012

Source: AZ internal data
With continued growth opportunities ahead

<table>
<thead>
<tr>
<th>Disease Areas</th>
<th>Segment Value 2012 ¹</th>
<th>CAGR% 2008-2012 ²</th>
<th>AZ Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma/COPD</td>
<td>$4.3bn</td>
<td>+11.3%</td>
<td><img src="image1" alt="Symbicort" /> <img src="image2" alt="Pulmicort" /></td>
</tr>
<tr>
<td>Diabetes</td>
<td>$4.4bn</td>
<td>+15.7%</td>
<td><img src="image3" alt="Onglyza" /> <img src="image4" alt="Kombiglyze" /> <img src="image5" alt="Forxiga" /></td>
</tr>
<tr>
<td>Hyperlipidaemia</td>
<td>$4.7bn</td>
<td>+12.2%</td>
<td><img src="image6" alt="CRESTOR" /></td>
</tr>
<tr>
<td>ACS and Stroke</td>
<td>$1.4bn</td>
<td>+11.1%</td>
<td><img src="image7" alt="Brilinta" /></td>
</tr>
</tbody>
</table>

Notes: ¹ Based on selected IMS ATC data in defined EM. ² CAGR% at CER
Source: IMS, internal analysis
## Evolving our strategy for continued success

### Emerging Market priorities

<table>
<thead>
<tr>
<th>2008 – 2012</th>
<th>Moving Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invest early in key markets</td>
<td>Accelerate investment in Top 15</td>
</tr>
<tr>
<td>Build Share of Voice with Best in Class Sales Force</td>
<td>Expand reach with multichannel capabilities</td>
</tr>
<tr>
<td>Develop strong local leadership</td>
<td>Transform Market Access, Patient Affordability and Medical Affairs</td>
</tr>
<tr>
<td>Focus on AZ products and build Branded Generics business</td>
<td>Refocus on AZ portfolio and innovative in-licensing</td>
</tr>
</tbody>
</table>
A case study in success – AstraZeneca China

5 of AZ’s top 7 brands are Category Leaders

CRESTOR and SYMBICORT fastest growing in their class

BRILINTA and ONGLYZA approved and ready for NRDL

AZ awarded “China’s Best Corporate Citizen with Highest Integrity”

Third successive year as a member of “China’s Top Employers”

1 January 2013
NRDL = National Reimbursement Drug List
Source: AZ internal data
AZ China accelerating growth in the second half of 2012

Source: IMS

![Chart showing growth percentage from 4Q09 to 4Q12 for Total China, MNCs, AZ, and AZ China. The chart indicates a steady growth for AZ China in the second half of 2012.](chart.png)
A case study in success – AstraZeneca Russia

Actions 2012/2013

- Sales Force
  - 20% increase\(^1\) in Primary Care Sales Force
- Multichannel Marketing
  - Launch of new Pharmacy Sales Force
- Manufacturing
  - State of the art facility in Kaluga. 30+ products
- Medical Affairs
  - First RWE study - IGNITE an IRESSA diagnostic study
- Research and Development
  - Predictive Science Centre in St. Petersburg

Source: AZ internal data
\(^1\) in 2013 compared to 2012
A case study in success – AstraZeneca Saudi Arabia

Sales

180
160
140
120
100
80
60
40
20
0


Sales Force

23% increase\(^1\) in Sales Force

Affordability and market access

60% increase\(^1\) in KAM team

Broad Market Reach

20% increase\(^1\) of targets and geographies

Medical Affairs

Integrated CV health programmes involving RWE, CME and patient awareness with MoH

Source: AZ internal data

\(^1\) in 2013 compared to 2012
Building the capabilities to succeed with new products

Source: IMS Sales data 2012; AZ analysis

Source: IMS Sales data 2012; AZ analysis  RMB:USD = 6.3
New AZ International operating unit – aligning the organization to meet the Emerging Market needs
Emerging Markets – A platform for sustained growth
High single digit growth through 2016

- Focus on AZ portfolio, in high growth disease areas
- Accelerate investment in our Emerging Market capabilities
  - Focus on China and top 15 markets
  - Broaden reach through multichannel marketing
  - Transform Market Access, Patient Affordability and Medical Affairs capabilities to support new products
- Innovative business development deals
- New International Operating Unit to focus organization on Emerging Market opportunity
Return to growth
Japan
Japan – a key growth platform for AstraZeneca

Japan pharmaceutical market sales
($bn, CER annual growth, 2012 Fx-rate)

- Favourable demographics: 36M people are expected to be over age 65 in 2020
- Second largest pharmaceutical market, with steady growth
- A legacy of success for AZ:
  - Leading Oncology business for many years
  - Now accelerating in Primary Care
- Strong success with recent launches, and more to come

Japan market sales by segment
(% of total value)

2008A, 2012A : Copyright © 2013 IMS Japan K.K. All rights reserved
Source: IMS JPM Jan 2008– Dec 2012 Printed with Permission
2016 F : Copyright © 2013 IMS Japan K.K. All rights reserved
Source: IMS Market Prognosis Asia/Australia 2012-2016, March, 2012
Note: Japan growth being driven by new PC portfolio offsetting impact of NHI price cuts plus patent expiry of established brands
We have a stable Oncology franchise and outgrow the market in Primary Care

AZ KK Net Sales ($bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Sales</th>
<th>Primary Care</th>
<th>Specialty Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>2.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>2.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CER annual growth rate ('00-'12)
- Total Sales: +8.6%
- Primary Care: +9.7%
- Specialty Care: +7.7%
Recent track record of successful launches with rapid share gain

Crestor Value Market Share

Symbicort Value Market Share

No. 1 statin in value

~47% in volume dynamic market share

1. Source: IMS NPA, January 2013, COPD and Asthma

Copyright © 2013 IMS Japan K.K.  All rights reserved
Source: IMS JPM Jan D2010– Dec 2012 Printed with Permission
Nexium achieving a rapid share gain in December

$3.4bn market size and growing by 3.1% in volume (CAGR ’08–’12)

Leadership in new patients

Volume market share trend (%)

Value market share trend (%)

1. Market share in volume 27.8% (Dec 2012) in new patients

Copyright © 2013 IMS Japan K.K. All rights reserved
Source: IMS JPM Jan 2012– Dec 2012 Printed with Permission
Note: 1. Market share in volume 27.8% (Dec 2012) in new patients
By 2016 we expect ~60% of revenue to come from new / recently launched products

<table>
<thead>
<tr>
<th>Recent launches</th>
<th>Launched</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRESTOR</td>
<td>2005</td>
</tr>
<tr>
<td>Symbicort</td>
<td>2010</td>
</tr>
<tr>
<td>Byetta</td>
<td>2010</td>
</tr>
<tr>
<td>Nexium</td>
<td>2011</td>
</tr>
<tr>
<td>Faslodex</td>
<td>2011</td>
</tr>
<tr>
<td>Ranmark</td>
<td>2012</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upcoming launches</th>
<th>Filing timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>forxiga</td>
<td>1Q 2013</td>
</tr>
<tr>
<td>Bydureon</td>
<td>2Q 2013²</td>
</tr>
<tr>
<td>Brilinta</td>
<td>2Q 2013</td>
</tr>
<tr>
<td>CAZ-AVI</td>
<td>2H 2014</td>
</tr>
<tr>
<td>Caprelsa</td>
<td>2015</td>
</tr>
<tr>
<td>Lesinurad</td>
<td>2017</td>
</tr>
</tbody>
</table>

Source: AstraZeneca Annual Reports and Q412 Press Release

¹ Transition to BMS/AZ from Lilly on 01.04.2013
² Refers to launch timing
## Return to Growth: Roadmap

<table>
<thead>
<tr>
<th>Immediate priorities</th>
<th>Mid-term goals</th>
<th>Long term aspiration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BRILINTA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Accelerate Performance</td>
<td>• Best in class OAP incl. PAD, 3yrs treatment, Stroke (tbc)</td>
<td>• Broaden beyond OAP</td>
</tr>
<tr>
<td>• Leadership in ACS</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Diabetes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Maximise portfolio (DDP-4, SGLT-2, GLP-1)</td>
<td>• Launch combinations</td>
<td>• Leverage potential mortality data</td>
</tr>
<tr>
<td><strong>Emerging Markets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Accelerate investment and growth</td>
<td>• Leverage capabilities</td>
<td>• Extend usage, access and broad market</td>
</tr>
<tr>
<td>• Build capabilities</td>
<td>• Launch of Forxiga, Brilinta, BD assets</td>
<td>• Launch of AZ pipeline assets</td>
</tr>
<tr>
<td><strong>Respiratory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Leverage COPD/PATHOS differentiation</td>
<td>• Launch new device</td>
<td>• Launch new asthma/COPD portfolio</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Maximise growth of marketed portfolio</td>
<td>• Launch key assets (Forxiga/Brilinta)</td>
<td>• Launch of AZ pipeline assets</td>
</tr>
</tbody>
</table>
Achieving scientific leadership

Briggs W. Morrison
Executive Vice President, Global Medicines Development
Chief Medical Officer
Agenda

- R&D Overview
- Phase III portfolio
- Oncology
  - Respiratory & Inflammation
Our path to scientific leadership

2006 / 2007

CAT & MedImmune acquisitions

R&D Transformation started

2010

Accelerate

Prioritise

Transform

2013
Our portfolio is poised to deliver

### Phase I
26 NMEs

<table>
<thead>
<tr>
<th>Small Molecule</th>
<th>Large Molecule</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZD2014</td>
<td>moxetumomab*</td>
</tr>
<tr>
<td>volitinib*</td>
<td>MEDI0639*</td>
</tr>
<tr>
<td>AZD1208</td>
<td>MEDI3617*</td>
</tr>
<tr>
<td>AZD9150</td>
<td>MEDI-565*</td>
</tr>
<tr>
<td>AZD8330*</td>
<td>MEDI6469*</td>
</tr>
<tr>
<td>AZD5363*</td>
<td>MEDI4736*</td>
</tr>
<tr>
<td>AZD8848*</td>
<td>MEDI4212</td>
</tr>
<tr>
<td>AZD7594*</td>
<td>MEDI2070*</td>
</tr>
<tr>
<td>AZD7624</td>
<td>MEDI9929*</td>
</tr>
<tr>
<td>AZD1446*</td>
<td>MEDIL5872*</td>
</tr>
<tr>
<td>AZD3293*</td>
<td>MEDI5117</td>
</tr>
<tr>
<td>ATM AVI</td>
<td>MEDI-557</td>
</tr>
<tr>
<td></td>
<td>MEDI-559</td>
</tr>
<tr>
<td></td>
<td>MEDI-550</td>
</tr>
</tbody>
</table>

### Phase II
21 NMEs

<table>
<thead>
<tr>
<th>Small Molecule</th>
<th>Large Molecule</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZD4547</td>
<td>MEDI-551*</td>
</tr>
<tr>
<td>olaparib</td>
<td>tremelimumab</td>
</tr>
<tr>
<td>selumetinib*</td>
<td>MEDI-573*</td>
</tr>
<tr>
<td>AZD5069</td>
<td>benralizumab*</td>
</tr>
<tr>
<td>AZD2115*</td>
<td>mavrilimumab*</td>
</tr>
<tr>
<td>AZD5423*</td>
<td>MEDI8968*</td>
</tr>
<tr>
<td>AZD1722*</td>
<td>sifalimumab*</td>
</tr>
<tr>
<td>AZD6765</td>
<td>MEDI-546*</td>
</tr>
<tr>
<td>AZD5213</td>
<td>tralokinumab</td>
</tr>
<tr>
<td>AZD3241</td>
<td>MEDI7183*</td>
</tr>
<tr>
<td>AZD5847</td>
<td></td>
</tr>
</tbody>
</table>

### Phase III/Registration
6 NMEs

<table>
<thead>
<tr>
<th>Small Molecule</th>
<th>Large Molecule</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lesinurad</td>
</tr>
<tr>
<td></td>
<td>fostamatinib*</td>
</tr>
<tr>
<td></td>
<td>metreleptin*</td>
</tr>
<tr>
<td></td>
<td>brodalumab*</td>
</tr>
<tr>
<td></td>
<td>CAZ AVI*</td>
</tr>
</tbody>
</table>

Changes since FY2012: MEDI-575 and MEDI7814 discontinued; AZD3480 returned to Targacept; AZD7624 progressed into Phase I; and AZD1722 progressed into Phase II.

Note: CXL status is pending an FDA discussion.

Parallel indications not shown above: fostamatinib (haematological malignancies); MEDI-551 (multiple sclerosis); and tralokinumab (ulcerative colitis).

* Partnered product
How we will measure our progress

Near term

• In 2013-2014 we anticipate ~5-7 NME Phase III starts
• 10 potential NME submission opportunities between now and 2016
• By 2016 we will be at the target volume in Phase III and Registration

Phase III & Registration NME pipeline volume (#)

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>6</td>
</tr>
<tr>
<td>2013E</td>
<td>8</td>
</tr>
<tr>
<td>2016E</td>
<td>9-10</td>
</tr>
</tbody>
</table>
Anticipate ~5-7 NME Phase III starts

<table>
<thead>
<tr>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>benralizumab</strong> asthma</td>
<td>AZD6765 depression</td>
</tr>
<tr>
<td>olaparib</td>
<td>sifalimumab/MEDI-546</td>
</tr>
<tr>
<td>olaparib</td>
<td>sifalimumab/MEDI-546</td>
</tr>
<tr>
<td>olaparib</td>
<td>sifalimumab/MEDI-546</td>
</tr>
<tr>
<td>moxetumomab pasudotox</td>
<td>mavrilimumab</td>
</tr>
<tr>
<td>hairy cell leukaemia</td>
<td>mavrilimumab</td>
</tr>
<tr>
<td>selumetinib</td>
<td>MEDI-551</td>
</tr>
<tr>
<td>non-small cell lung cancer</td>
<td>MEDI-551</td>
</tr>
</tbody>
</table>
## Valuing our portfolio

### Potential peak year sales for New Medicines

<table>
<thead>
<tr>
<th>Over $1B</th>
<th>Up to $1B</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZD5069</td>
<td>benralizumab</td>
</tr>
<tr>
<td></td>
<td>fostamatinib (2013)</td>
</tr>
<tr>
<td></td>
<td>MEDI-551</td>
</tr>
<tr>
<td></td>
<td>olaparib (2013)</td>
</tr>
<tr>
<td></td>
<td>selumetinib</td>
</tr>
<tr>
<td></td>
<td>sifalimumab / MEDI-546</td>
</tr>
<tr>
<td></td>
<td>tralokinumab</td>
</tr>
<tr>
<td>AZD4547</td>
<td>ATM AVI</td>
</tr>
<tr>
<td>AZD6765</td>
<td></td>
</tr>
<tr>
<td>mavrilimumab</td>
<td></td>
</tr>
</tbody>
</table>

### Key NMEs

- AZD4547
- AZD6765
- mavrilimumab
- ATM AVI
- CAZ AVI
- metreleptin (2013)
- moxetumomab
- brodalumab¹ (2015)
- lesinurad (2014)
- naloxegol (2013)
- fostamatinib (2013)
- selumetinib
- sifalimumab / MEDI-546
- ATM AVI
- CAZ AVI (2014)
- metreleptin (2013)
- moxetumomab

### Strength of evidence to date

- **Low**
- **Medium**
- **High**

### Key

- **Phase III**
- **Phase II**
- **Phase I**

### Notes

- **KEY:** (20xx) Year in brackets represents planned year of regulatory submission
- ¹ Gross revenue – not AZ share for brodalumab
- PYS includes lifecycle management opportunities for these NMEs
We will deliver the portfolio and deliver productivity improvements

Drivers

• Prioritise our projects
• Accelerate and simplify our best programmes
• Focus on key disease areas

R&D Investment by stage 2013-2016 (%)

<table>
<thead>
<tr>
<th>Stage</th>
<th>2013</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Late</td>
<td>40%</td>
<td>47%</td>
</tr>
<tr>
<td>Early</td>
<td>38%</td>
<td>32%</td>
</tr>
<tr>
<td>Discovery</td>
<td>22%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Productivity: Increasing output with broadly flat investment
Agenda

- R&D Overview
- Phase III portfolio
- Oncology
  Respiratory & Inflammation
## Current Phase III and Registration pipeline

<table>
<thead>
<tr>
<th>6 NMEs</th>
<th>10 new indications &amp; formulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAZ AVI* serious infections</td>
<td>Bydureon <em>Dual Chamber Pen</em></td>
</tr>
<tr>
<td>lesinurad* gout¹</td>
<td>Forxiga <em>triple therapy</em></td>
</tr>
<tr>
<td>naloxegol* opioid-induced constipation</td>
<td>SaxaDapa <em>FDC diabetes</em></td>
</tr>
<tr>
<td>metreleptin lipodystrophy</td>
<td>Onglyza <em>outcomes SAVOR-TIMI 53</em></td>
</tr>
<tr>
<td>fostamatinib* rheumatoid arthritis</td>
<td>Faslodex 1st line advanced breast cancer</td>
</tr>
<tr>
<td>brodalumab* psoriasis</td>
<td>IRESSA treatment beyond progression</td>
</tr>
</tbody>
</table>

Note: * covered today ¹ Chronic management of hyperuricaemia in patients with gout
Naloxegol moves to regulatory submission in Q3 2013

Positioning

- >69M patients taking opioids for chronic pain
- 40-50% of patients (28-35M) develop opioid induced constipation (OIC)
- Less than half get OIC relief with current treatment options that include OTC and Rx laxatives
- Positive Phase III data and on track for Q3 2013 submission pending a pre-NDA meeting with the FDA

Source: Nektar

This programme is being developed in partnership with Nektar

Once a day oral, peripherally acting, μ-opioid receptor antagonist

Source: Nektar
Fostamatinib on track to report Phase III data in Q2 2013

OSKIRA Clinical Programme

- ~$14bn RA market expected to reach $18bn in 2022
- Significant unmet need in TNF and DMARD inadequate responders
- On track to report during Q2 2013 and file in Q4 2013

This programme is being developed in partnership with Rigel
Lesinurad is an add-on therapy to XO inhibitors

Asymptomatic hyperuricaemia
57M

Diagnosed Gout
15.3M

Gout treated with chronic therapy
10.0M

2nd line Gout
4-6M

Gout Severe disease

No treatment
Except Japan

Acute Treatment with colchicine, NSAIDs, corticosteroids, Ilaris

Allopurinol is most common first line urate lowering therapy
Febuxostat alternative

Limited options today. Increase allopurinol dose, switch to febuxostat

Krystexxa® is an injectable reserved for severe patients

Targeted positioning for lesinurad

Source: Decision Resources 2012. Major markets only: US, EU5, Japan 2013 numbers and Biotrends Chart Review 2010
Lesinurad filing in H2 2014

Positioning

- Majority of the 15.3M diagnosed¹ (10M treated with chronic therapy) gout patients are inefficient excretors of sUA
- 40% to 60% (4-6M) of patients fail to achieve sUA targets (<6mg/dL)² on current SOC which only decrease the production of sUA
- Lesinurad’s complimentary MOA increases the excretion of sUA and in combination with SOC, helps uncontrolled patients achieve sUA targets
- Data expected H1 2014, Regulatory filings H2 2014

4 week Phase IIB data

- Percentage of patients with serum urate <6mg/dL at week 4

Source: Study RDEA594-203 ITT analysis

¹ Decision Resources 2012. Major markets only: US, EU5, Japan 2013 numbers
² Biotrends Chart Review 2010
CAZ AVI filing in H2 2014

Positioning

• Treating hospitalised patients with intra-abdominal infections (cIAI), urinary tract infections (cUTI), hospital acquired pneumonia (HAP), or ventilator acquired pneumonia (VAP) where 1st line treatment failure due to resistance, could be devastating

• Over 1M patients a year suffer from infections known or suspected to be resistant to cephalosporins

• Data expected H1 2014, Regulatory filings H2 2014

Increasing cephalosporin resistance is leading to a serious public health issue

Proportion of 3rd gen. cephalosporins (R) resistant Klebsiella pneumoniae

Source: ECDC/Dundas/TESSy
Brodalumab on track to report in 2014

A targeted monoclonal antibody that binds IL-17R

- Three Phase III studies in moderate to severe plaque psoriasis on track
- Psoriatic arthritis: Phase II completed, efficacy results positive
- Asthma: Phase II study completed
- Psoriasis on track for Phase III readout 2014, filing in 2015

This programme is being developed in partnership with Amgen

Phase II psoriasis OLE study

Source: Kim Papp et. al.
Forxiga: strong efficacy in key measures

Successesful progress

- DECLARE, our dapagliflozin CV Outcomes Trial, scheduled to initiate in April 2013
- MAA for dapaglifozin/metformin FDC submitted in EU in December 2012
- Plan to resubmit NDA in mid 2013

Mean change from baseline to Week 24 LOCF

<table>
<thead>
<tr>
<th>Measure</th>
<th>Placebo (n=134)</th>
<th>Forxiga 10mg (n=132)</th>
<th>Placebo (n=136)</th>
<th>Forxiga 10mg (n=133)</th>
<th>Placebo (n=119)</th>
<th>Forxiga 10mg (n=122)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c (%)</td>
<td>-0.30</td>
<td>-0.84*</td>
<td>-0.90</td>
<td>-0.90</td>
<td>-0.20</td>
<td></td>
</tr>
<tr>
<td>Body weight (kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systolic blood pressure (mmHg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This programme is being developed in partnership with Bristol-Myers Squibb.


Significantly different from placebo. Statistical testing not performed for systolic blood pressure. Values for HbA1c and body weight are adjusted means; for systolic blood pressure means. Error bars are 95% confidence intervals. LOCF – last observation carried forward.
Productivity through simplified study design and flawless execution

**Saxagliptin – SAVOR Study**

- Study design will evaluate the efficacy and safety of saxagliptin across a broad spectrum of T2DM patients
- 790 Investigator sites in 26 countries and 6 continents
- ~16,500 Patients enrolled in 19 months


This programme is being developed in partnership with Bristol-Myers Squibb
On track to achieving scientific leadership

- Quality Phase II portfolio
- Improved productivity for the same budget
- A prioritised portfolio
- Growing Phase III
- Distinctive science
- Unique combination of small molecules, biologics, immuno-therapies and protein engineering
Agenda

R&D Overview

Phase III portfolio

Oncology
Respiratory & Inflammation
Oncology

Susan Galbraith
Head of Innovative Medicines Oncology iMed
Key messages

**Significant progression**
Acceleration of olaparib, selumetinib and moxetumomab pasudotox
Advanced early portfolio with evidence of anti-tumour activity

**Novel science and combinations**
Robust, innovative early-stage opportunities, including differentiated small molecule and immune-mediated therapy combinations

**Accelerated delivery**
Three potential submissions by 2016
Strong pipeline provides foundation for success

### Phase I
12 NMEs

<table>
<thead>
<tr>
<th>Small Molecule</th>
<th>Large Molecule</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZD1208 (PIM)</td>
<td>MEDI-565* (CEA BITE)</td>
</tr>
<tr>
<td>AZD2014 (TOR)</td>
<td>MEDI0639* (DLL-4)</td>
</tr>
<tr>
<td>AZD5363* (AKT)</td>
<td>MEDI3617* (ANG2)</td>
</tr>
<tr>
<td>AZD8330* (MEK)</td>
<td>MEDI4736* (PD-L1)</td>
</tr>
<tr>
<td>AZD9150† (STAT3)</td>
<td>MEDI6469* (mOX40)</td>
</tr>
<tr>
<td>volitinib* (MET)</td>
<td>moxetumomab pasudotox* (CD22)</td>
</tr>
</tbody>
</table>

### Phase II
6 NMEs

<table>
<thead>
<tr>
<th>Small Molecule</th>
<th>Large Molecule</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZD4547 (FGFR)</td>
<td>MEDI-551* (CD19)</td>
</tr>
<tr>
<td>olaparib (PARP)</td>
<td>MEDI-573* (IGF)</td>
</tr>
<tr>
<td>selumetinib²* (MEK)</td>
<td>tremelimumab (CTLA-4)</td>
</tr>
</tbody>
</table>

### On market/lifecycle management
3 assets

- Caprelsa
- Faslodex
- Iressa

---

* Partnered asset
† Entered Phase I portfolio within last 12 months under license from Isis Pharmaceuticals Inc.
² AZD6244, ARRY-142886

Fostamatinib haematological malignancies not shown as this is an LCM parallel indication as disclosed at FY 2012 results.

Anti-tumour activity evidence in 80% of Phase I assets
Combinations will anchor our scientific leadership

AZ uniquely positioned to combine agents within and between key scientific mechanisms

Target key tumour drivers and resistance

MEDI-551 (CD19)
Moxetumomab pasudotox (CD22)
Olaparib (PARP)
AZD4547 (FGFR)
Selumetinib (MEK)

Tip cancer cells into cell death

AZD4547 (FGFR)
MEDI-551 (CD19)
Moxetumomab pasudotox (CD22)
Olaparib (PARP)

Enhance immune response to improve overall survival

Immune-mediated therapy of cancer (IMT-C):
MEDI4736 (PD-L1)
MEDI6469 (mOX40)
Tremelimumab (CTLA-4)

programmes highlighted today:

+ Immune-mediated therapy of cancer (IMT-C):
+ Target key tumour drivers and resistance
+ Tip cancer cells into cell death
+ Enhance immune response to improve overall survival
Accelerating olaparib and filing in 2013

Leading PARP inhibitor

- Exciting updates for ASCO
- 2013 milestones (BRCAm ovarian) – potential EMA filing, Phase III trial start
- Initial opportunity – ~10K patients with BRCAm ovarian cancer
- Multiple opportunities beyond ovarian – gastric, breast, other solid tumours
- Peak year sales forecast >$1bn

Mechanism of action

Significant opportunity beyond ovarian cancer

Potential Trial starts in 2013

- Five Phase III in ovarian, gastric and breast
- Three Phase II in lung
- Two Phase IB in prostate

Beyond ovarian

- DDR-impaired cancers
- BRCAm ovarian
- Advanced BRCAm breast
- Early TN BRCAm breast
- Other solid tumours
- Lung tumours
- Gastric

DDR - DNA damage response
Strong DNA damage response (DDR) pipeline

First-in-class approaches to exploit tumours’ inherent DDR dependencies

- **Olaparib (PARP inh.)**
  - Single-strand break repair; regulator of ETS family transcription factors

- **AZD6738 (ATR inh.)**
  - Stalled replication fork signalling
  - Phase I start in 2013

- **ATM (protein kinase)**
  - Double-strand break signalling
  - Preclinical
Accelerating multiple opportunities with selumetinib

**Starting pivotal trials in 2013**

- Effective and well-tolerated as monotherapy
- Induces ‘re-differentiation’ in thyroid cancer
- Active in combination with chemo in multiple tumour types
- Opportunity to lead in high unmet need indications with MEK-dependence
- 2H13 trial starts – 2L KRASm NSCLC (Phase III – planned); thyroid (pivotal Phase IIB)

**Selumetinib in MEK-driven tumours**

- Thyroid
- GI cancers
- KRASm NSCLC
- Uveal melanoma
- Neurofibromatosis

Images: NF – Klaus D. Peter, Gummersbach, Germany (Creative Commons license); GI – courtesy of Deirdre Cohen and Howard Hochster, Yale University, USA; Lung – courtesy of E. Cortell, Harvard Vanguard Medical Associates, USA; NSCLC – non-small cell lung cancer
Active in combination with chemotherapy

- High and durable response rate in segment with poor response to docetaxel alone
- Improved PFS
- Tolerated in combination with doublet chemotherapy
- KRASm NSCLC opportunity – ~25K 2nd-line; ~45K 1st-line

Evidence in 2nd-line KRASm NSCLC

<table>
<thead>
<tr>
<th></th>
<th>Selumetinib + Docetaxel(^3) (N=43)</th>
<th>Placebo + Docetaxel(^3) (N=40)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response</strong></td>
<td>16 (37%)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Non-response</strong></td>
<td>27 (63%)</td>
<td>40 (100%)</td>
</tr>
</tbody>
</table>

- Median PFS = 5.3 vs. 2.1 months\(^4\)
- Trend to increased median OS (9.4 vs. 5.2 months)

---

3. Selumetinib 75 mg BD; docetaxel 75 mg/m\(^2\)
4. HR 0.58, 80% CI (0.42, 0.79), p = 0.0138

PFS – progression free survival
## Best-in-class opportunity: selumetinib + chemotherapy

Selumetinib is combinable at monotherapy MTD, and achieves preclinical target concentration; trametinib combination requires lower dose

<table>
<thead>
<tr>
<th>Drug</th>
<th>Maximum tolerated dose (MTD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Selumetinib</strong></td>
<td></td>
</tr>
<tr>
<td>Monotherapy¹</td>
<td>75 mg BD</td>
</tr>
<tr>
<td>Combination with docetaxel²</td>
<td>75 mg BD</td>
</tr>
<tr>
<td>Combination with doublet chemotherapy³</td>
<td>75 mg BD</td>
</tr>
<tr>
<td><strong>Trametinib</strong></td>
<td></td>
</tr>
<tr>
<td>Monotherapy⁴</td>
<td>2 mg QD</td>
</tr>
<tr>
<td>Combination with pemetrexed⁵</td>
<td>1.5 mg QD</td>
</tr>
<tr>
<td>Combination with docetaxel⁵</td>
<td>0.5 mg QD</td>
</tr>
</tbody>
</table>

² Kim K, et al. Mol Cancer Ther 2011;10 (suppl; abstr B225)
³ Unpublished data
Moxetumomab pasudotox is a novel armed antibody

First-in-class

- Novel protein synthesis inhibitor payload
- Active in high unmet need setting: ~6K relapsed patients in acute lymphoblastic leukaemia and hairy cell leukaemia\(^1\)
- Accelerated development with two trial starts in 1H13:
  - Hairy cell leukaemia (Phase III) – FDA orphan designation
  - Paediatric acute lymphoblastic leukaemia (Phase II)

Unique mechanism of action

- Binding domain of anti-CD22 antibody fused to truncated form of Pseudomonas exotoxin (PE38)

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\(^1\) US and EU only – CancerMPact®, Kantar Health, available from www.cancermpact.com, accessed 28 Feb 2013; internal estimates
Robust, durable response to moxetumomab pasudotox

Paediatric ALL Phase I Data

- 88% overall response rate and 55% complete response (CR)\(^2\)
- Durability of response greater than two years\(^3\)
- Majority of CRs were molecular CRs\(^3\)

Hairy Cell Leukaemia Phase I data

AZD4547 is a first-in-class FGFR inhibitor

Several exciting clinical opportunities

• Clinical activity (one PR, two PET responses) in FGFR-amplified tumours

• Initial opportunity in FGFR-amplified gastric cancer (~6K patients)\(^1\)

• Multiple active studies
  − Gastric Phase II – ongoing; data readout in 2014
  − Breast (Phase I / II) and NSCLC (Phase I) trials ongoing

FGFR2-amplified metastatic GE junction adenocarcinoma\(^2\)

1 G7 only – CancerMPact®, Kantar Health, available from www.cancermpact.com, accessed 28 Feb 2013; Decision Resources; internal estimates

2 Images courtesy of Prof. David Cunningham, Royal Marsden Hospital, UK
MEDI-551 is potential best-in-class in B cell lymphomas

Enhanced ADCC

- High-affinity mAb with enhanced antibody-dependent cell-mediated cytotoxicity (ADCC) against broadly expressed CD19 target

- Opportunity and biological rationale in ~40K second line patients in DLBCL and CLL

- Active head-to-head studies with Rituxan in relapsed / refractory DLBCL and CLL ongoing – first Phase II data readout in 2014

Chemotherapy-refractory DLBCL

Pre-Rx

PR after 4 cycles

---

2 Forero A, et al. ASH Poster Presentation 2012 (abstr 3677)
DLBCL – diffuse large B-cell lymphoma
CLL – chronic lymphocytic leukaemia
Combinations will anchor our scientific leadership

AZ uniquely positioned to combine agents within and between key scientific mechanisms

Target key tumour drivers and resistance

Tip cancer cells into cell death

Enhance immune response to improve overall survival

Programmes highlighted today:

- AZD4547 (FGFR)
- Selumetinib (MEK)

- MEDI-551 (CD19)
- Moxetumomab pasudotox (CD22)
- Olaparib (PARP)

Immune-mediated therapy of cancer (IMT-C):

- MEDI4736 (PD-L1)
- MEDI6469 (mOX40)
- Tremelimunab (CTLA-4)
### Broad IMT-C portfolio well-suited for combinations

<table>
<thead>
<tr>
<th>MEDI4736</th>
<th>Anti-PD-L1 mAb</th>
<th>Tremelimumab</th>
<th>Anti-CTLA-4 mAb</th>
<th>MEDI6469</th>
<th>mOX40 agonist mAb</th>
</tr>
</thead>
</table>
| • Phase I in solid tumours  
• Validated pathway in multiple tumour types  
• Multiple Phase I to Phase III opportunities | • Phase II in solid tumours  
• Validated pathway  
• Safety and efficacy data in >1,000 patients  
• Focus on use in novel combinations | • Murine mAb in Phase I in solid tumours  
• Clinical activity with single cycle in refractory patients  
• First-in-class; humanised antibodies will build on single agent and combination data |

![PD-L1 expression in lung cancer](image1)

**Tumour regression**

**Chemotherapy**

**Progression-free survival (proportion)**

**Patients**

**Change in tumour size**

1. Internal data
3. Weinberg AD, AACR Tumor Immunology Conference Presentation, 2012
Strong potential for proprietary combination

Tremelimumab (CTLA-4) and MEDI4736 (PD-L1) combination

- CTLA-4 and PD-L1 blockade are biologically distinct
- Combination improves anti-tumour activity in preclinical models
- Potential for applicability in multiple tumour types
- Combination trials in multiple indications beginning in 2013-14, with data read-outs beginning in 2014-15 that can inform registration-aimed trials

Colorectal cancer murine tumour model

1 Internal data; lines on charts represent individual animals in a group

128
# IMT-C development plan focused on novel, proprietary combination opportunities

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2H</td>
<td>1H</td>
<td>2H</td>
</tr>
<tr>
<td>Monotherapy in new indications with favourable immune signature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novel IMT-C combinations:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• MEDI4736 (PD-L1) + Tremelimumab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• CTLA-4 + mOX40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other proprietary IMT-C combinations, including with AZ small molecules (e.g. IRESSA)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMT-C combinations with Standard of Care (e.g. chemotherapy, TKIs, RT)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Registration enabling trials begin**

TKI – tyrosine kinase inhibitor
RT – radio therapy

**Trials initiated**

**Data read-outs begin**
## Newsflow highlights of programmes reviewed

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Asset</th>
<th>Indication</th>
<th>Clinical data and potential milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>AZD4547</td>
<td>breast</td>
<td>Phase II start[^1]</td>
</tr>
<tr>
<td></td>
<td>MEDI4736</td>
<td>multiple</td>
<td>Combination trials start</td>
</tr>
<tr>
<td></td>
<td>moxetumomab pasudotox</td>
<td>HCL</td>
<td>Phase III start</td>
</tr>
<tr>
<td></td>
<td>moxetumomab pasudotox</td>
<td>paediatric ALL</td>
<td>Phase II start[^1]</td>
</tr>
<tr>
<td></td>
<td>olaparib</td>
<td>BRCAm ovarian</td>
<td>Potential EMA filing</td>
</tr>
<tr>
<td></td>
<td>olaparib</td>
<td>multiple</td>
<td>Data readouts (ASCO)</td>
</tr>
<tr>
<td></td>
<td>olaparib</td>
<td>ovarian, gastric, breast</td>
<td>Phase III starts</td>
</tr>
<tr>
<td></td>
<td>selumetinib</td>
<td>uveal melanoma</td>
<td>Data readout (ASCO)</td>
</tr>
<tr>
<td></td>
<td>selumetinib</td>
<td>NSCLC (2L KRASm)</td>
<td>Phase III start</td>
</tr>
<tr>
<td></td>
<td>selumetinib</td>
<td>thyroid</td>
<td>Phase IIB start (pivotal)[^1]</td>
</tr>
<tr>
<td>2014</td>
<td>AZD4547</td>
<td>gastric</td>
<td>Phase II data; Phase III start</td>
</tr>
<tr>
<td></td>
<td>MEDI-551</td>
<td>haematological malignancies</td>
<td>Phase II data; Phase III start</td>
</tr>
</tbody>
</table>

[^1]: Additional trial in new tumour type (not lead indication)

Only a partial news flow shown for 2014
Phase I and II programmes not reviewed in depth today

<table>
<thead>
<tr>
<th>Asset</th>
<th>Mechanism</th>
<th>Phase</th>
<th>Disease area(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>fostamatinib</td>
<td>SYK</td>
<td>II</td>
<td>Diffuse large B-cell lymphoma</td>
</tr>
<tr>
<td>MEDI-573</td>
<td>IGF</td>
<td>II</td>
<td>Breast cancer</td>
</tr>
<tr>
<td>AZD1208</td>
<td>PIM</td>
<td>I</td>
<td>Acute myelogenous leukaemia, solid tumours</td>
</tr>
<tr>
<td>AZD2014</td>
<td>TOR</td>
<td>I</td>
<td>Breast cancer</td>
</tr>
<tr>
<td>AZD5363</td>
<td>AKT</td>
<td>I</td>
<td>Breast cancer, prostate cancer</td>
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<tr>
<td>AZD8330</td>
<td>MEK</td>
<td>I</td>
<td>Solid tumours</td>
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<td>STAT3</td>
<td>I</td>
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Key messages

**Significant progression**
Acceleration of olaparib, selumetinib and moxetumomab pasudotox
Advanced early portfolio with evidence of anti-tumour activity

**Novel science and combinations**
Robust, innovative early-stage opportunities, including differentiated small molecule and immune-mediated therapy combinations

**Accelerated delivery**
Three potential submissions by 2016
Respiratory & Inflammation

Bing Yao
Head, Respiratory, Inflammation & Autoimmune iMed, MedImmune
Key messages

**Strong respiratory franchise**
Strong heritage including Symbicort which continues to provide clinically important improvement in asthma and COPD

**Robust pipeline**
Robust pipeline (20 NMEs) in Respiratory and Immunology with competitive science and strong partnerships

**Accelerated delivery**
Great pipeline progress, 3 assets accelerated, significant news flow in next 18 months (7 PoC data readouts), and 4 potential submissions by 2016
Significant unmet needs and opportunity for growth in both asthma and COPD

### Asthma

<table>
<thead>
<tr>
<th></th>
<th>Number of active patients (G7 markets, M)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma prevalence</td>
<td>52</td>
</tr>
<tr>
<td>Diagnosed patients</td>
<td>38</td>
</tr>
<tr>
<td>Treated patients</td>
<td>33</td>
</tr>
<tr>
<td>Uncontrolled patients</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td><strong>1.7M</strong> severe, inadequately controlled despite compliance</td>
</tr>
</tbody>
</table>

### COPD

<table>
<thead>
<tr>
<th></th>
<th>Number of active patients (G7 markets, M)²</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPD prevalence</td>
<td>54</td>
</tr>
<tr>
<td>Diagnosed patients</td>
<td>20</td>
</tr>
<tr>
<td>Treated patients</td>
<td>14</td>
</tr>
</tbody>
</table>

¹ G7 markets only. Sources: Decision Resources 2012, GINA 2011, ATS Guidelines for Asthma, Adelphi Group 2009

² G7 markets only. Sources: Decision Resources 2010, Datamonitor 2011, GOLD guideline
Symbicort well positioned in both asthma and COPD

**GINA (Asthma): Step and treatment¹**

1. Start: SABA
2. Add: Low dose ICS or LTRA
3. Add: Low Dose ICS/LABA or medium-high dose ICS
4. Add: Medium/High ICS/LABA or ICS/LABA+LTRA
5. Add: Low dose oral steroid or Xolair (~1.7m patients)

**GOLD (COPD): Patient Segments and treatment²**

1. Mild: SAMA prn or SABA prn
2. Moderate: LAMA or LABA
3. Severe: ICS+LABA or LAMA
4. Very severe: ICS + LABA and/or LAMA

**Unique speed of onset, long acting**

**Differentiation in exacerbated patients**

**Unique easy to use and patent protected devices—with continued device innovation**

¹ GINA Asthma 2011, ATS Guidelines for Asthma
² GOLD – COPD 2013 Recommended first choice
Symbicort: Unique differentiation in COPD

62% reduction of moderate/severe exacerbations vs. tiotropium

Exacerbation rate per patient-year

CLIMB¹

27% fewer moderate to severe exacerbations than patients treated with FDC salmeterol + fluticasone³

Exacerbation rate per patient-year

PATHOS (RWE)²,³

---

² Real World Evidence (RWE) = observational data extracted from health care records
³ Larsson K et al. 2013 J Int Med; doi; 10.1111/joim.12067
Symbicort continues to demonstrate strong growth in US, Japan and Emerging Markets

CER CAGR (2008-2012)

- China: 45%
- Japan: 45%
- US: 41%
- Other: 9%
- W Europe: 3%

Note: 1. 2010-2012 annual growth rate
Source: AZ internal
Focused pipeline across small molecules and biologics

**Phase I**
7 NMEs
- Small Molecule: AZD7594*
- Large Molecule: MEDI2070*
- Small Molecule: AZD7624
- Large Molecule: MEDI4212
- Small Molecule: AZD8848*
- Large Molecule: MEDI5872*
- Small Molecule: MEDI9929*

**Phase II**
10 NMEs
- Small Molecule: AZD2115*
- Large Molecule: MEDI8968*
- Small Molecule: AZD5069
- Large Molecule: MEDI7183*
- Small Molecule: AZD5423*
- Large Molecule: MEDI8968*

**Phase III / Registration**
3 NMEs
- Small Molecule: fostamatinib*
- Large Molecule: brodalumab*
- Large Molecule: benralizumab*
- Large Molecule: mavrilimumab*
- Large Molecule: sifalimumab*
- Small Molecule: tralokinumab
- Small Molecule: MEDI-546*
- Small Molecule: MEDI-5872*
- Large Molecule: MEDI7183*
- Large Molecule: MEDI8968*

**Lifecycle management**
- Small Molecule: Symbicort

* Partnered
Note: Progression of MEDI-551 in MS as a LCM parallel indication not shown

- Personalised strategy
- Recently accelerated
Complementary personalised approaches for different severe asthmatic segments

Asthma is a highly heterogeneous disease

- Developing understanding of underlying cause
- Studying patient sub-types
- Developing diagnostics
- Tailoring therapies

- tralokinumab (IL-13)
- benralizumab (IL-5Rα)
- Neutrophil-high
- IgE-high
- TH2-driven
- EOS-dominant

AZD5069 (CXCR2)
Benralizumab is in development for severe asthma

**Eosinophilic targeted asthma**

- Asthmatics with eosinophilia represent ~40-60% of severe asthmatics
- Eosinophil count associated with exacerbation
- Binding with high affinity to IL-5Rα depletes eosinophils

**Mechanism of Action: anti-IL-5Rα**

Programme is in partnership with Kyowa Hakko Kirin
Benralizumab potently depletes eosinophils and reduces exacerbations

**Phase I – Eosinophil depletion in periphery and lung**

- Decreased rate of exacerbations (p=0.007)\(^1\)
- Decreased rate of hospitalizations (p=0.022)\(^1\)

**Phase IIA high risk asthma**

- Decreased rate of exacerbations (p=0.007)\(^1\)
- Decreased rate of hospitalizations (p=0.022)\(^1\)

---

Busse et al, JACI 2010, ATS 2012 San Francisco, Abstract A3961

Molfino et al, ATS 2012

\(^1\) For the combined treatment group vs. SoC

\(^2\) In mild atopic asthma
### Benralizumab offers an unique mechanism of action for eosinophil positive patients

<table>
<thead>
<tr>
<th>Differentiation</th>
<th>Development plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Receptor vs. ligand approach</td>
<td><strong>Phase IIB asthma</strong></td>
</tr>
<tr>
<td>• Q8 week subcutaneous dosing</td>
<td>• Primary endpoint in reduction in annual asthma exacerbation rate</td>
</tr>
<tr>
<td>• Complete eosinophil depletion with potential for improved clinical outcome(^1)</td>
<td>• Phase IIB results: 1H13</td>
</tr>
<tr>
<td>• Patient selection approach through blood test; Targeted to discriminate eosinophilia</td>
<td>• Phase III start: 2H13 (6 month acceleration)</td>
</tr>
</tbody>
</table>

**Phase IIA COPD**

• Severe and very severe COPD patients with elevated eosinophils
• Phase IIA readout: 1H13

\(^1\) Depletion was reversible and was observed up to 3 months. Not seen in all doses
Tralokinumab is targeted against a cytokine central to asthma

Mechanism of Action: anti-IL-13

- Target severe, inadequately controlled asthma
- Tralokinumab a fully human antibody targeting IL-13
- Key cytokine involved in many aspects of asthma
- Validated target from pre-clinical and clinical studies
Tralokinumab has demonstrated clinical response

**Change in baseline in lung function**

- Placebo (n=42)
- Tralokinumab Combined (n=144)

**Follow-Up Period**

- p=0.072 at 13 weeks

**Dosing Period**

**Development plan**

**Phase IIB asthma**
- Assesses exacerbation reduction vs. placebo in severe uncontrolled asthma
- Evaluating spectrum of blood and serum biomarkers
- Accelerated Phase III start: 1H14

**Other**
- IPF as respiratory Life Cycle opportunity

Piper E et al. Eur Respir J. 2013, 41:330-8

FEV1 = Forced Expiratory Volume
IPF = Idiopathic Pulmonary Fibrosis
AZD5069 is a potential first in class oral therapy for severe asthma

Mechanism of Action: CXCR2 antagonist

- CXCR2 expressed on neutrophils and other cell types
- Implicated in neutrophil recruitment, migration, activation, and goblet cell hyperplasia leading to pulmonary damage
- Primary care drug with wide reach

Adapted from Gernez Y et al., Eur Resp J 2010; 35: 467–469.
AZD5069 reduces neutrophils in airway of bronchiectasis patients

- 69% reduction of sputum neutrophils compared to placebo (p-value=0.004)

Source: Internal data

AZD5069 development plan

- Phase IIB in uncontrolled persistent asthma patients
  - Explore effect on exacerbations
  - Determine safety profile
  - Potential Phase III start in 2014
Combinations: The next wave of innovation for respiratory diseases

Inhaled Fixed Dose combination of SGRM with bi-functional bronchodilator (MABA) gives ‘triple action’ in a single device
AZD5423 (COPD/Phase IIA) – a non-steroidal Selective Glucocorticoid Receptor Modulator (SGRM)

SGRM concept

- Best-in-class opportunity in primary care setting
- Potential for ICS-like (or better) efficacy with improved safety profile
- Attenuated allergen-induced airway inflammation in patients with mild allergic asthma
- A Phase II efficacy and safety study in COPD patients will read out 2Q 2013

Allergen challenge data

O’Byrne PM et al. (Abstract accepted for American Thoracic Society International Conference May 2013)
LAR – late asthmatic response
AUC – area under the curve
AZD2115 (COPD/Phase IIA) – Engineering balanced pharmacology with dual activity in one molecule

**Mechanism of Action: MABA**

- Inhaled long-acting bronchodilators improve airflow, symptoms and QoL in COPD
- LABA and LAMA cause prolonged bronchodilation
- Advantages of a MABA (LABA/LAMA combination in one)

**Bronchodilation in COPD patients**

*Mean change from baseline to Peak(0-4h) FEV1(mL) SEM after single inhaled dose

- a) Greater than Indacaterol 150 μg, p=0.046
- b) Greater than Indacaterol/Tiotropium 150/18 μg, p=0.048
### Additional Phase I and II programmes

<table>
<thead>
<tr>
<th>Disease area</th>
<th>Asset</th>
<th>Mechanism</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPD</td>
<td>AZD7594</td>
<td>iSGRM</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td>AZD7624</td>
<td>ip38</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td>benralizumab</td>
<td>IL-5Rα</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>MEDI8968</td>
<td>IL1-R</td>
<td>II</td>
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<tr>
<td>Asthma</td>
<td>AZD8848</td>
<td>iTLR7</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td>MEDI4212</td>
<td>IgE</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td>MEDI9929</td>
<td>TSLP</td>
<td>I</td>
</tr>
<tr>
<td>IPF</td>
<td>tralokinumab</td>
<td>IL-13</td>
<td>II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disease area</th>
<th>Asset</th>
<th>Mechanism</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crohn’s Disease</td>
<td>MEDI2070</td>
<td>IL-23</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td>MEDI7183</td>
<td>αβ7</td>
<td>II</td>
</tr>
<tr>
<td>SLE</td>
<td>MEDI5872</td>
<td>B7RP1</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td>sifalimumab</td>
<td>IFNα</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>MEDI-546</td>
<td>IFNαR</td>
<td>II</td>
</tr>
<tr>
<td>MS</td>
<td>MEDI-551</td>
<td>CD19</td>
<td>I</td>
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<tr>
<td>Ulcerative Colitis</td>
<td>tralokinumab</td>
<td>IL-13</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>MEDI7183</td>
<td>αβ7</td>
<td>II</td>
</tr>
<tr>
<td>RA</td>
<td>mavrilimumab</td>
<td>GM-CSF</td>
<td>II</td>
</tr>
<tr>
<td>Gout</td>
<td>RDEA3170</td>
<td>URAT1</td>
<td>I</td>
</tr>
</tbody>
</table>

RDEA3170 and MEDI-551 MS are not shown in the earlier pipeline view which is an NME–only view.
## Clinical data and potential programme starts

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Asset</th>
<th>Indication</th>
<th>Clinical data and potential milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>AZD5423</td>
<td>COPD</td>
<td>Phase II data</td>
</tr>
<tr>
<td></td>
<td>benralizumab</td>
<td>asthma</td>
<td>Phase II data, Phase III start</td>
</tr>
<tr>
<td></td>
<td>benralizumab</td>
<td>COPD</td>
<td>Phase II data</td>
</tr>
<tr>
<td></td>
<td>fostamatinib</td>
<td>RA</td>
<td>Phase III data, Submission</td>
</tr>
<tr>
<td></td>
<td>MEDI-546</td>
<td>SLE</td>
<td>Phase II data</td>
</tr>
<tr>
<td></td>
<td>sifalimumab</td>
<td>SLE</td>
<td>Phase II data</td>
</tr>
<tr>
<td></td>
<td>Symbicort BAI</td>
<td>asthma/COPD</td>
<td>Submission</td>
</tr>
<tr>
<td></td>
<td>tralokinumab</td>
<td>asthma</td>
<td>Phase II data</td>
</tr>
<tr>
<td>2014</td>
<td>AZD5069</td>
<td>asthma</td>
<td>Phase II data, Phase III start</td>
</tr>
<tr>
<td></td>
<td>brodalumab</td>
<td>psoriasis</td>
<td>Phase III data</td>
</tr>
<tr>
<td></td>
<td>brodalumab</td>
<td>psoriatic arthritis</td>
<td>Phase III start</td>
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<td></td>
<td>mavrilimumab</td>
<td>RA</td>
<td>Phase II data, Phase III start</td>
</tr>
<tr>
<td></td>
<td>MEDI7183</td>
<td>Crohn’s, UC</td>
<td>Phase II data</td>
</tr>
<tr>
<td></td>
<td>sifalimumab, MEDI-546</td>
<td>SLE</td>
<td>Phase III start</td>
</tr>
<tr>
<td></td>
<td>tralokinumab</td>
<td>Asthma</td>
<td>Phase III start</td>
</tr>
</tbody>
</table>
Key messages

**Strong respiratory franchise**
Strong heritage including Symbicort which continues to provide clinically important improvement in asthma and COPD

**Robust pipeline**
Robust pipeline (20 NMEs) in Respiratory and Immunology with competitive science and strong partnerships

**Accelerated delivery**
Great pipeline progress, 3 assets accelerated, significant news flow in next 18 months (7 PoC data readouts), and 4 potential submissions by 2016
On track to achieving scientific leadership

- Quality Phase II portfolio
- Improved productivity for the same budget
- A prioritised portfolio
- Distinctive science
- Unique combination of small molecules, biologics, immuno-therapies and protein engineering
- Growing Phase III
Our Financial Objectives and Capital Allocation Policy

Simon Lowth
Chief Financial Officer
Our financial objectives and capital allocation policy

1. Drive on-market value
2. Reinvest for growth and value
3. Maintain progressive dividend
4. Fund value-enhancing business development & acquisitions

Maintain strong balance sheet
Drive value from our on-market franchises

- Invest in on-market growth platforms to return to growth
- Maintain sector-leading productivity to create investment headroom and flexible cost base
Invest in on-market growth platforms to return to growth

Illustrative

- Declining major brands
- Internal Growth Platforms
- Established portfolio

Revenue

Time
Significant restructuring has been undertaken to drive productivity and reshape business

<table>
<thead>
<tr>
<th>Phase</th>
<th>Headcount</th>
<th>Costs $m</th>
<th>Annual benefits $m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 (2007-09)</td>
<td>12,600</td>
<td>2,506</td>
<td>2,400</td>
</tr>
<tr>
<td>Phase 2 (2010-11)</td>
<td>8,860</td>
<td>2,102</td>
<td>1,900</td>
</tr>
<tr>
<td>Phase 3 (2012-14)</td>
<td>7,300</td>
<td>2,100</td>
<td>1,600</td>
</tr>
<tr>
<td>Announced 2 Feb 2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implemented by 31 Dec 2012</td>
<td>6,300</td>
<td>1,819</td>
<td>1,300</td>
</tr>
<tr>
<td>Integrated into Phase 4</td>
<td>1,150</td>
<td>380</td>
<td>300</td>
</tr>
</tbody>
</table>
Half of the restructuring savings have been reinvested to drive future growth

Net headcount development 2006-2012

Operations | SG&A | R&D | Other | R&D | Emerging Markets | Other

-27,000 Gross

Net -15,100
We have improved core pre-R&D margins significantly

<table>
<thead>
<tr>
<th></th>
<th>2002-06</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core pre-R&amp;D Margin</td>
<td>42%</td>
<td>55%</td>
</tr>
<tr>
<td>Revenue</td>
<td>$22bn</td>
<td>$28bn</td>
</tr>
<tr>
<td>CoGS</td>
<td>23%</td>
<td>18%</td>
</tr>
<tr>
<td>SG&amp;A</td>
<td>35%</td>
<td>30%</td>
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</tbody>
</table>
Our goal is to sustain core pre-R&D margins in the range of 48-52%
Restructuring delivers our science-led site strategy and further productivity improvement

<table>
<thead>
<tr>
<th></th>
<th>Total cost $m</th>
<th>Cash $m</th>
<th>Non-cash $m</th>
<th>Roles eliminated</th>
<th>Roles relocated</th>
<th>Benefits $m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remaining Phase 3</td>
<td>380</td>
<td>380</td>
<td></td>
<td>1,150</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td>Footprint</td>
<td>1,400</td>
<td>800</td>
<td>600</td>
<td>1,600</td>
<td>2,500</td>
<td>190</td>
</tr>
<tr>
<td>Additional SG&amp;A</td>
<td>520</td>
<td>520</td>
<td></td>
<td>2,300</td>
<td></td>
<td>310</td>
</tr>
<tr>
<td>Total Phase 4</td>
<td>2,300</td>
<td>1,700</td>
<td>600</td>
<td>5,050</td>
<td>2,500</td>
<td>800</td>
</tr>
</tbody>
</table>
Restructuring delivers our science-led site strategy and further productivity improvement

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<tr>
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<th>Roles relocated</th>
<th>Benefits $m</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D</td>
<td>1,380</td>
<td>780</td>
<td>600</td>
<td>1,470</td>
<td>1,870</td>
<td></td>
</tr>
<tr>
<td>SG&amp;A</td>
<td>790</td>
<td>790</td>
<td>-</td>
<td>3,020</td>
<td>630</td>
<td></td>
</tr>
<tr>
<td>COGS</td>
<td>130</td>
<td>130</td>
<td>-</td>
<td>560</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2,300</td>
<td>1,700</td>
<td>600</td>
<td>5,050</td>
<td>2,500</td>
<td>800</td>
</tr>
</tbody>
</table>
Reinvest for growth and value

Drive on-market value

48-52% core pre-R&D margin

Reinvest for growth and value
Our goal is to reinvest up to 50% of our post-tax, pre-R&D on-market cashflows to drive future growth and value

- **In-house R&D**: Develop science and progress our pipeline through internal R&D
- **Business development**: Science and product collaborations, partnering and in-licensing
- **Capital expenditure**: Facilities, equipment and information technology
- **Merck**: Contingent payments and 2014 exit

Reinvest up to 50% post-tax, pre-R&D on-market cashflows
- *Prioritised to Growth Platforms and Core TAs*
- *ROI > WACC*
Maintain progressive dividend policy

Drive on-market value

48-52% core pre-R&D margin

Reinvest for growth and value

Reinvest up to 50% of on-market cashflow; ROI > WACC

Maintain progressive dividend

Commitment to hold or grow dividend per share with target cover of 2x Core EPS
Pursue value-enhancing business development and acquisitions

Drive on-market value

48-52% core pre-R&D margin

Reinvest for growth and value

Reinvest up to 50% of on-market cashflow; ROI > WACC

Maintain progressive dividend

Hold or Grow DPS; 2x Core EPS Cover

Fund value-enhancing business development & acquisitions

4
We will seek to accelerate growth through larger scale business development and bolt-on acquisitions

- Research collaborations
- Smaller scale product in-licensing & partnerships

\textit{Included in 50\% reinvestment rate}

- Larger scale product in-licensing & partnerships
- Bolt-on acquisitions

\textit{Excluded from 50\% reinvestment rate}

- Prioritised to Growth Platforms and Core TAs
- ROI > WACC
- Funded from residual cash and debt, subject to maintaining balance sheet objectives
Our financial objectives and capital allocation policy

Drive on-market value

- 48-52% core pre-R&D margin

Reinvest for growth and value

- Reinvest up to 50% of on-market cashflow; ROI > WACC

Maintain progressive dividend

- Hold or Grow DPS; 2x Core EPS Cover

Fund value-enhancing business development & acquisitions

- Strategically aligned; ROI > WACC
Our financial objectives and capital allocation policy

- **Drive on-market value**: 48-52% core pre-R&D margin
- **Reinvest for growth and value**: Reinvest up to 50% of on-market cashflow; ROI > WACC
- **Maintain progressive dividend**: Hold or Grow DPS; 2x Core EPS Cover
- **Fund value-enhancing business development & acquisitions**: Strategically aligned; ROI > WACC

**Maintain strong balance sheet**
- Target strong, investment grade
- Maintain operational cash balance
- Repurchase shares periodically
Innovation & Growth
Closing comments

Pascal Soriot
Chief Executive Officer
A bold ambition with 3 priorities and clear choices

1. Achieve scientific leadership
2. Return to growth
3. Be a great place to work
A bold ambition with 3 priorities and clear choices

Achieve scientific leadership

1. **FOCUS** on distinctive science in 3 core TAs
2. **PRIORITISE & ACCELERATE** our pipeline
3. **TRANSFORM** our innovation culture & model
A bold ambition with 3 priorities and clear choices

2

Return to growth

FOCUS on key growth platforms

ACCELERATE through business development

TRANSFORM through specialty care / biologics
A bold ambition with 3 priorities and clear choices

3

Be a great place to work

FOCUS on simplification of our business

DRIVE continued productivity improvements

EVOLVE our culture
Our journey – what you can expect
How will we measure success?
A journey with three time horizons

Immediate priorities  Mid-term goals  Long-term aspiration
How will we measure success?
A journey with three time horizons

2013-2014

Immediate priorities
• BRILINTA, Diabetes, Emerging Markets
• 5-7 projects into phase III by end of 2014
• Business development

Mid-term goals

Long-term aspiration
How will we measure success?

A journey with three time horizons

2013-2014
Immediate priorities

2015-2016
Mid-term goals

• BRILINTA, Diabetes, and Emerging Markets
• Increase Phase III pipeline by 2016 with potential to double
• 1+ NME launches per year
• Business development

Long-term aspiration
How will we measure success?

A journey with three time horizons

- **2013-2014**: Immediate priorities
- **2015-2016**: Mid-term goals
- **2017-2020**: Long-term aspiration

- Sustainable growth – beating today’s consensus
- Scientific leadership
- 2 NMEs per year sustainably
We will measure our progress against key metrics

Scientific leadership
- NME approvals
- Major LCM approvals
- Phase III NME volume
- PYS for approvals
- Phase II starts

Return to growth
- BRILINTA sales
- Diabetes sales
- Respiratory sales
- Emerging Market sales
- Japan sales

Financials
- Total return to shareholders
- Cashflow
Our strategy

- **Differentiated strategy**
  Pure play innovation/science strategy combined with global commercial scale

- **Growth levers**
  Internal growth platforms can return the company to growth with focused BD/M&A acting as an accelerator

- **Pipeline potential**
  Promising phase II pipeline that will advance to a strong late stage portfolio by 2016

- **Re-focused for delivery**
  Refocused efforts on 3 core TAs, resources and BD/M&A efforts prioritised for growth and innovation

- **Building for sustainability**
  Bold steps being taken to transform R&D innovation model, culture and operating model

- **Committed to shareholder returns**
  Productivity improvement & commitment to dividend policy
AstraZeneca
Investor Day 2013

Accelerate
Prioritise
Transform
Key planning milestones

2013
- naloxegol Q3
- fostamatinib Q4
- olaparib H2

2014
- lesinurad
- CAZ AVI

2015
- brodalumab

2016
- Nexium (US)

2017
- Crestor (US)
- Seroquel XR LoE (US)