

China and Emerging Markets

Webcast and conference call for investors and analysts

13 December 2018



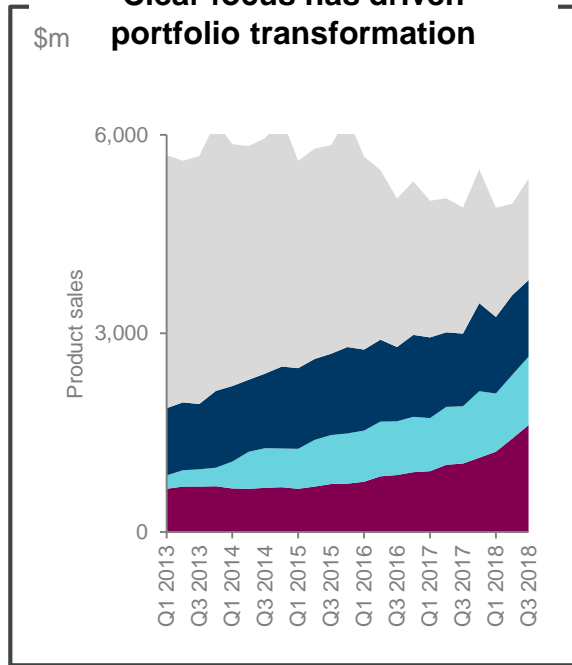
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Emerging Markets: key to company transformation

Clear focus has driven portfolio transformation

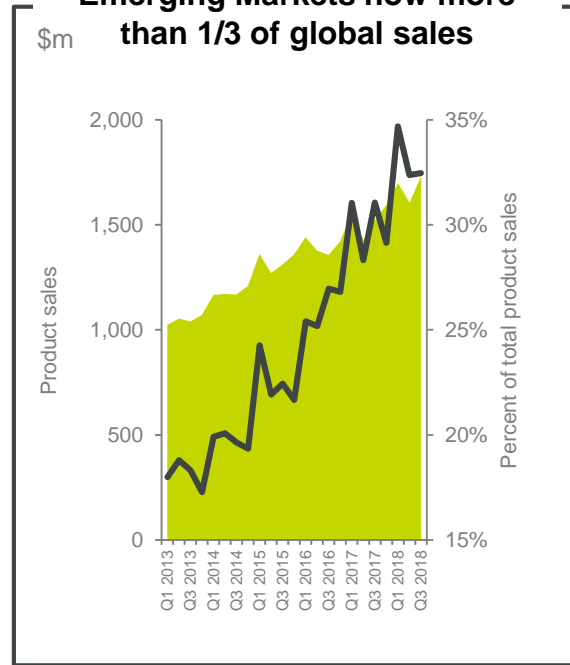


Oncology New CVRM Respiratory Other

New Cardiovascular, Renal and Metabolism (CVRM) comprises *Brilinta*, Diabetes and *Lokelma*.

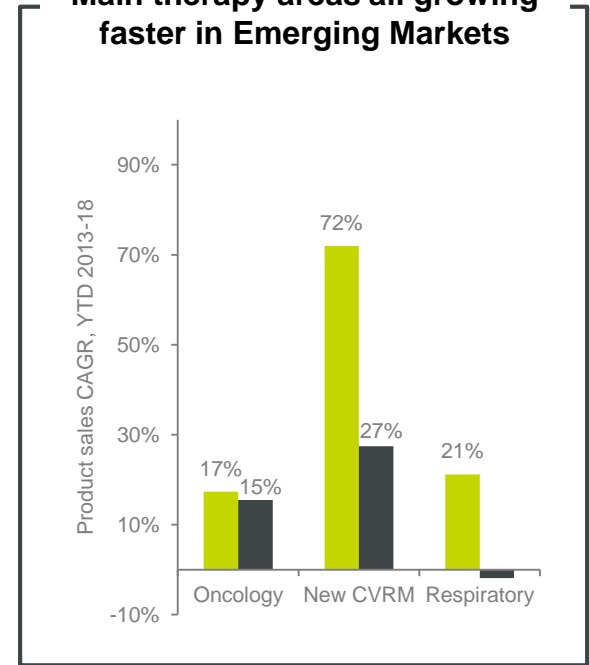
Values and changes at constant exchange rates (CER).

Emerging Markets now more than 1/3 of global sales



Emerging Markets Percent of total product sales

Main therapy areas all growing faster in Emerging Markets



Emerging Markets Non-Emerging Markets (US, EU, Est. RoW)

YTD is defined as the nine months to 30 September.



Speakers



Leon Wang
Executive Vice President,
International; President,
AstraZeneca China



Kristina Rodnikova
Vice President, Oncology
International; Vice President, Middle
East & Africa, Russia and Eurasia



Pelin Incesu
Vice President, Commercial
Strategy International



Agenda



Emerging Markets



China



Oncology



CVRM



Respiratory



Closing and Q&A



Agenda



Emerging Markets



China



Oncology



CVRM



Respiratory

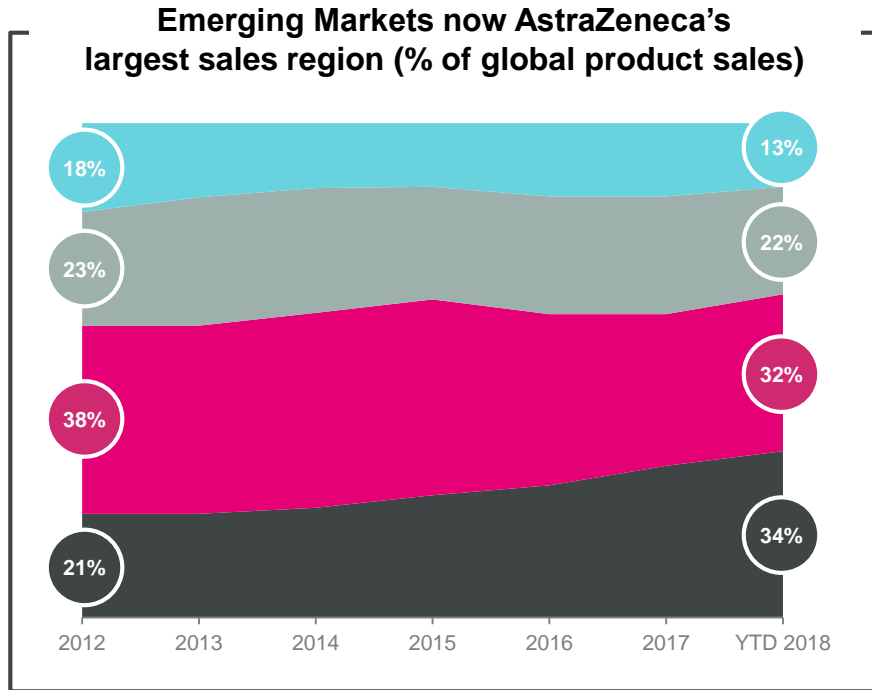


Closing and Q&A



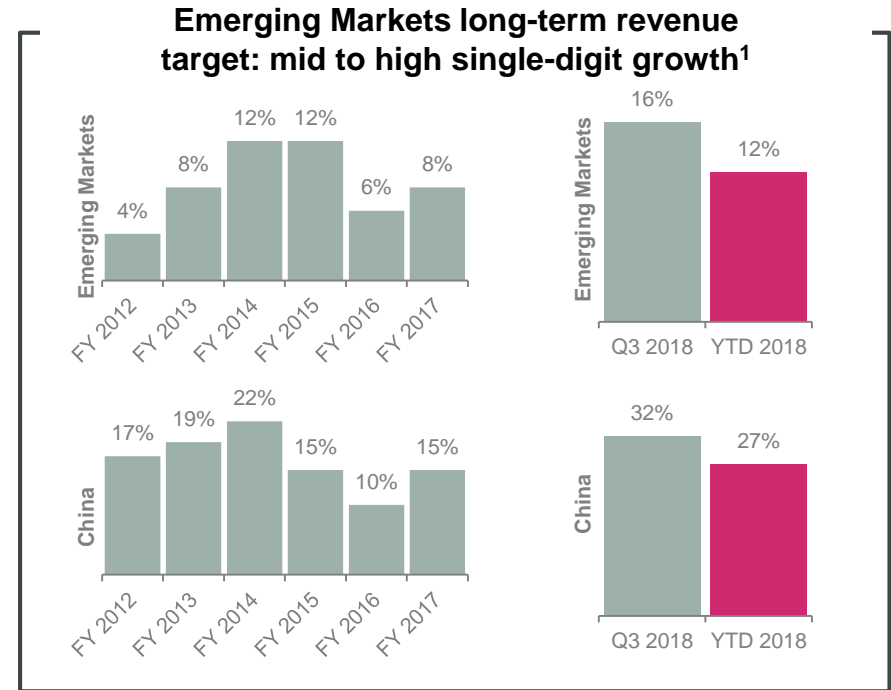
Emerging Markets: growing importance

Strong, sustained growth: meeting aspirations each year



Emerging Markets US Europe Est. RoW

Values at actual exchange rates; changes at CER.

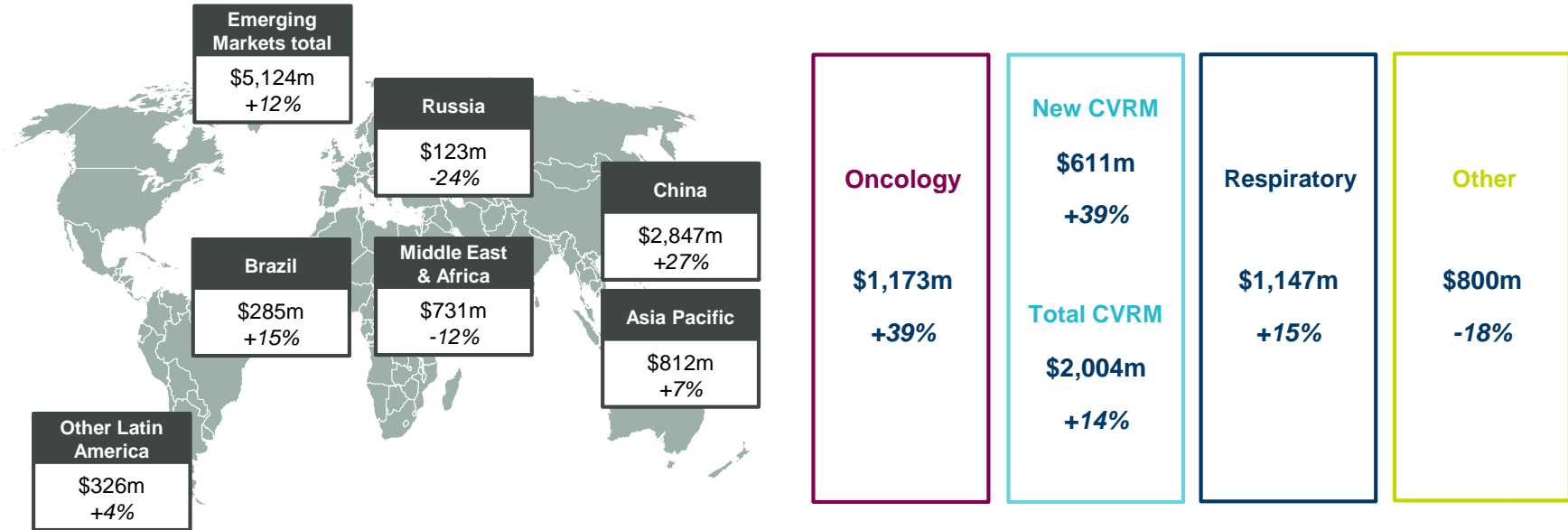


1. Company presentation, May 2014.

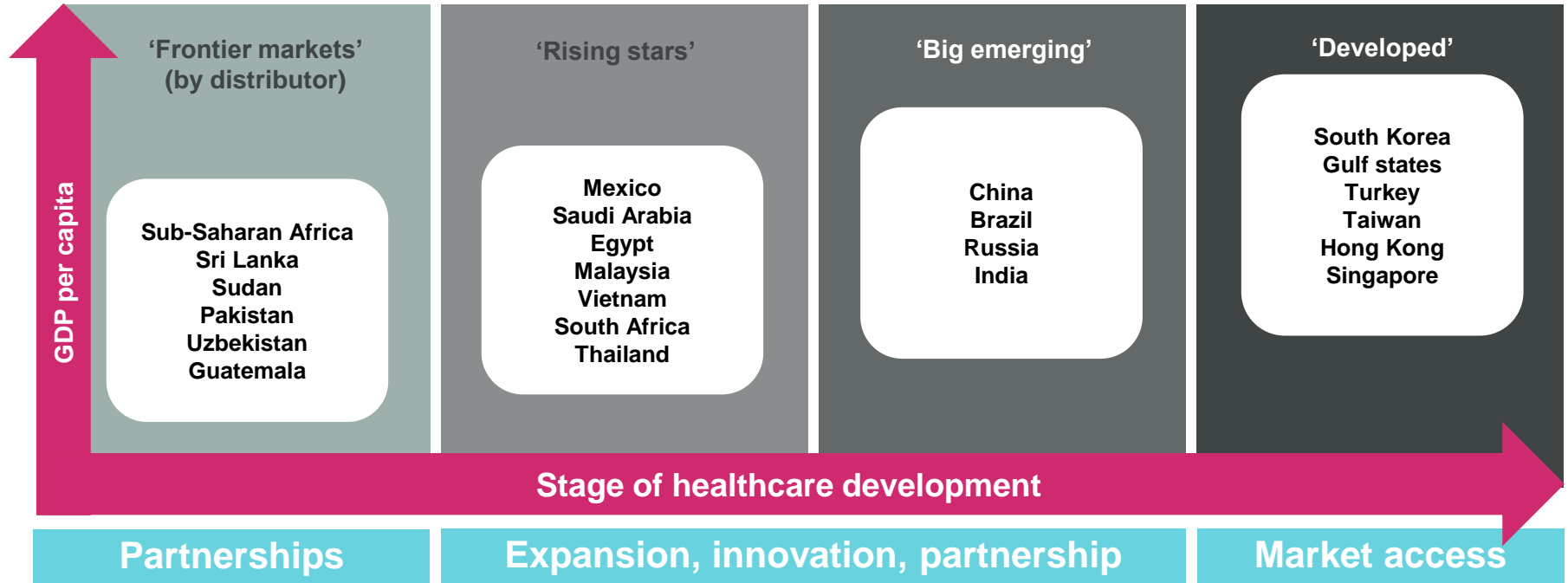


Emerging Markets: portfolio of diverse markets

Product sales performing strongly in 2018

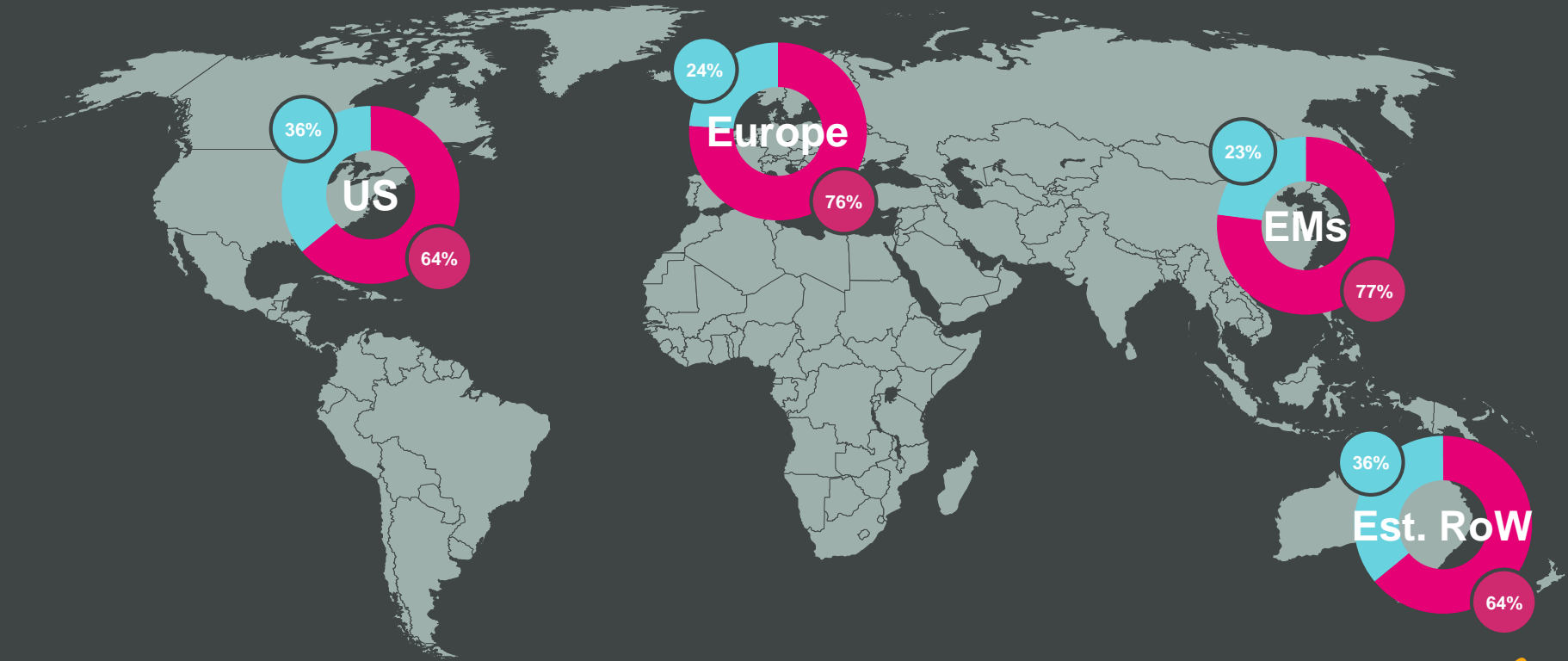


Significant growth engines across the region



Specialty care: large opportunity


















Proportion of total product sales



Specialty care Primary care
Product sales, YTD 2018.



Emerging Markets: leveraging legacy and new medicines

Main therapy areas	Oncology	   
	New CVRM	     
	Respiratory	    
Legacy medicines	Oncology	  
	CVRM	  
	Other	

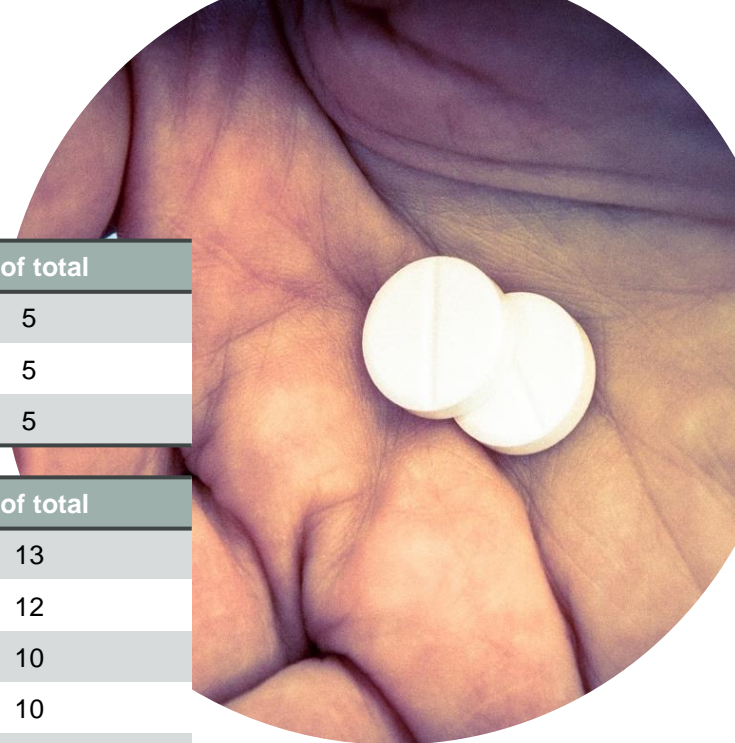


Emerging Markets: top-10 medicines

Fast-growing and well-diversified portfolio

New medicines	Product sales YTD 2018 (\$m)	% change	% of total
<i>Tagrisso</i>	266	206	5
<i>Forxiga</i>	242	57	5
<i>Brilinta</i>	232	31	5

Older medicines	Product sales YTD 2018 (\$m)	% change	% of total
<i>Pulmicort</i>	688	16	13
<i>Crestor</i>	631	7	12
<i>Nexium</i>	524	-	10
<i>Seloken</i>	493	12	10
<i>Symbicort</i>	364	12	7
<i>Zoladex</i>	313	20	6
<i>Iressa</i>	226	10	4

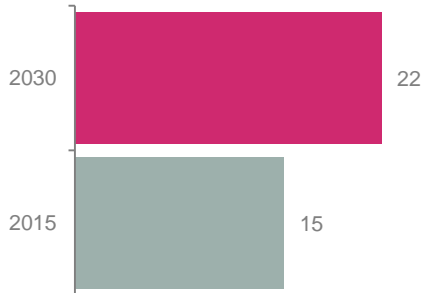


Values at actual exchange rates; changes at CER.



Unmet medical needs are increasing

Oncology: all-cancer incidence (millions)



- c.25% of global growth from China
- Cancer incidence in India to increase by c.50% in 15 years

CVRM: obesity prevalence (millions)



- 85% of global growth from China, India and developing African countries including Nigeria and South Africa

Respiratory

Asthma

- 339m patients worldwide affected by asthma. Seven patients die every 10 minutes as a result of asthma

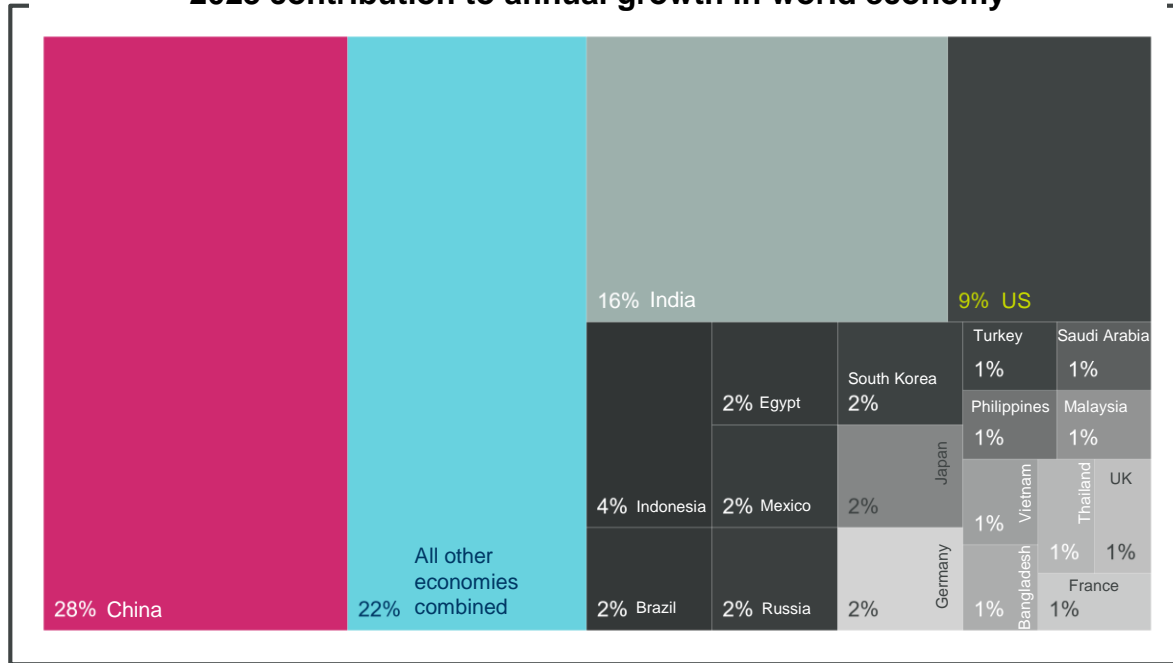
Chronic obstructive pulmonary disease (COPD)

- 384m patients worldwide affected by COPD. Third-largest cause of death by 2020
- The overwhelming majority of COPD deaths occur in low and middle-income countries



Emerging Markets: to dominate world GDP growth

2023 contribution to annual growth in world economy



China becoming a dominant player

US share of growth contribution to decline:

- 12% in 2019
- 9% in 2023

Established Rest of World markets will make way for new growth engines, including:

- Turkey
- Malaysia
- Vietnam

Source: Bloomberg (IMF projections adjusted for purchasing power parities), October 2018.



Bringing AstraZeneca to life: Emerging Markets



Emerging Markets: strategy



Expansion

- Portfolio selling
- Retail
- Customer base
- Market access



Innovation

- Patient-centric, fully-integrated ecosystems
- New-medicine localisation
- Medicine development and launch acceleration



Partnership

- Central and local government
- Business development
- Local healthcare providers
- Local capital markets



Agenda



Emerging Markets



China



Oncology



CVRM



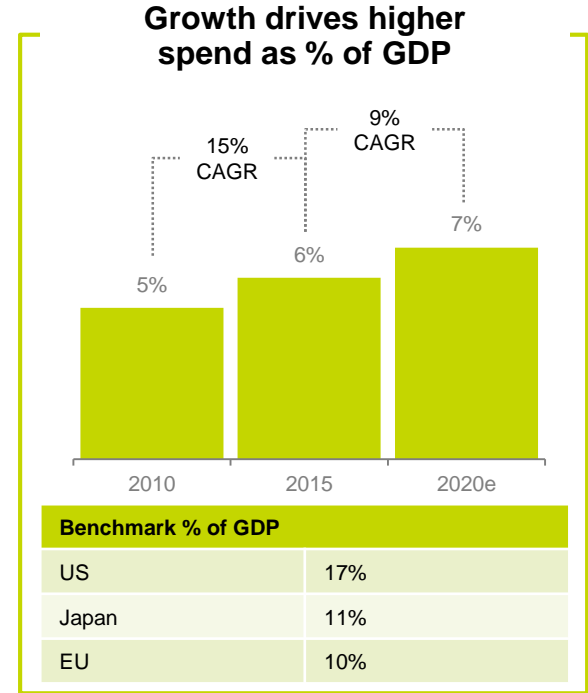
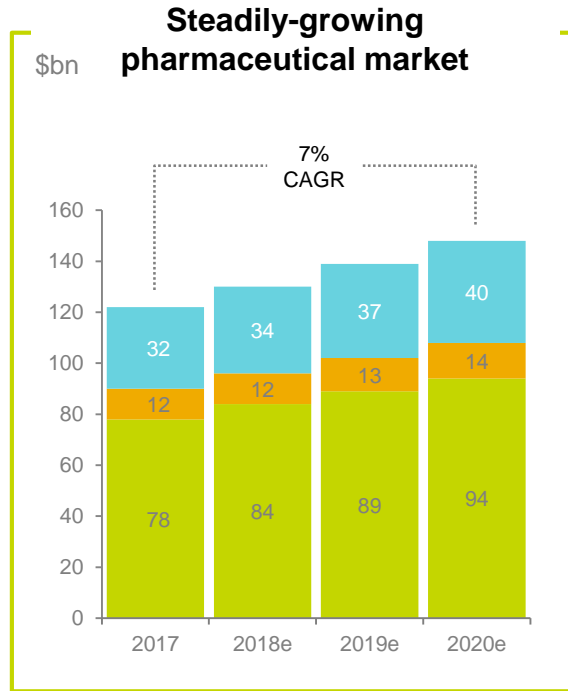
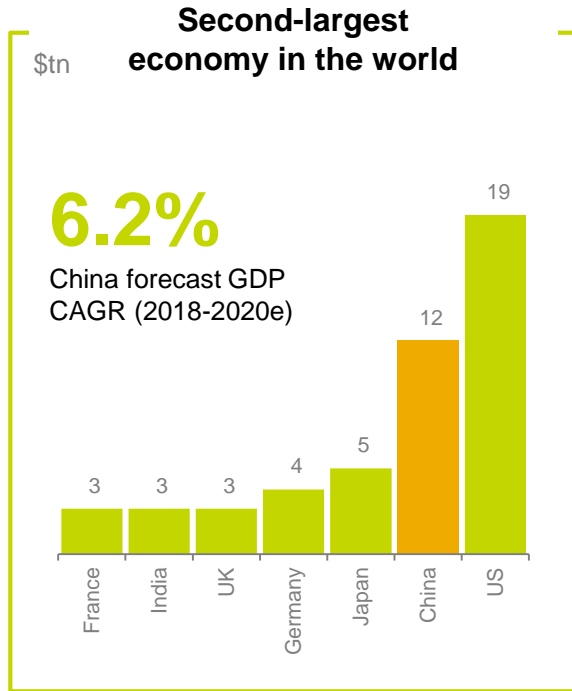
Respiratory



Closing and Q&A



China: strong growth outlook



Source: China National Statistics; NHFPC Statistics; IMF World Economic Outlook (GDP); World Bank Database, IQVIA Prognosis Q3 2018.

Hospital Others¹ Retail (urban)

1. Includes smaller hospitals (<100 beds) such as community health centres (CHCs) and township health centres and retail outlets in rural areas.

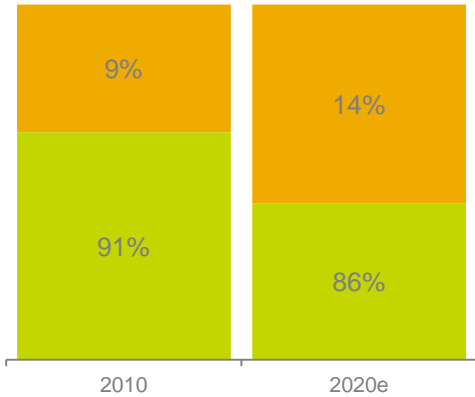
Source: benchmark as per World Bank, 2015.



Demographic trends driving demand for quality healthcare



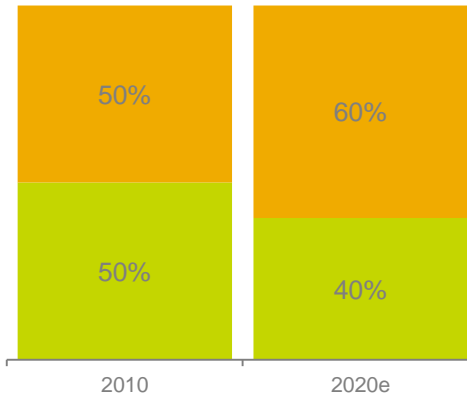
**Ageing population
(population by age group)**



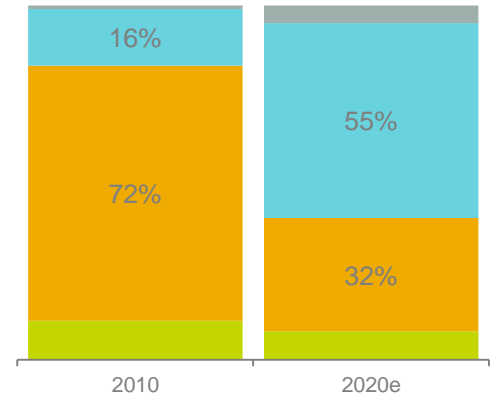
**Rapid urbanisation
(rural vs. urban residents)**

170

cities with more than one million inhabitants by 2030



**Growing middle class
(population by household income)**



≥ 65 years old <65 years old

Source: China National Bureau of Statistics (2010 annual data), Economist Intelligence Unit, China National Urbanization Development Plan.

Urban Rural

Wealthy (>\$35k) Middle class (\$15-35k) Aspirational (\$6-15k) Poor (<\$6k)



Three basic health-insurance funds



National and provincial reimbursement

Urban employee basic medical insurance (UEBMI)

290 million

people covered

- Employees and urban retirees
- Mandatory (paid once a month)
- National average utilisation rate is 83%
- Demand for innovative medicines and services

Urban resident basic medical insurance (URBMI)

380 million

people covered

- Students, infants, adolescents, urban residents not covered by UEBMI
- Voluntary (paid once a year)
- National average utilisation rate is 82%

Other

New rural cooperative medical insurance list (NRCMI)

670 million

people covered

- All rural residents (rural housing account)
- Voluntary (paid once a year)
- Limited reimbursement ratio
- National average utilisation rate is c.96%



Healthcare reforms enhancing innovation and access



Fast-track approvals for innovative medicines

- Accelerated regulatory review and approval timelines
- Local innovation encouraged



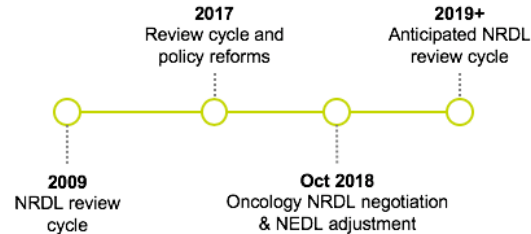
	Priority review	Approved
	Sep 2016	Mar 2017



	Jan 2018	Aug 2018
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More-frequent NRDL¹ review cycles and NEDL² adjustments

- Broader access, especially in grassroots institutions
- Six AstraZeneca medicines entered the NRDL in 2017-18 (including *Tagrisso*)
- 10 AstraZeneca medicines entered the NEDL in 2018



IP rights and the impact of generics

- Regulatory data protection
- Patent-term extension and patent linkage
- Generic Consistency Quality Evaluation: elevate the quality of generics while managing the government drug reimbursement budget
- '4+7'³ tendering results disclosed on 6 December: *Iressa* (+) and *Crestor* (-) included

1. National Reimbursement Drug List.

2. National Essential Drug List.

Source: China Human Resources and Social Security Statistics.

3. 4+7 scope: 4 provincial cities (Beijing, Shanghai, Tianjin, Chongqing) and 7 sub-provincial cities (Shenyang, Dalian, Guangzhou, Shenzhen, Xiamen, Chengdu, Xi'an).



Bringing AstraZeneca to life: China



AstraZeneca: a trusted healthcare partner in China



>\$750m

investment in the discovery and development of life-changing medicines

>13,000

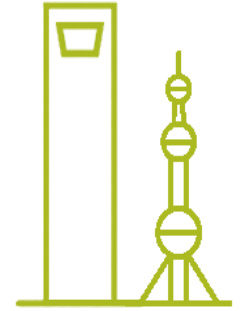
employees throughout China

阿斯利康中国25周年

ASTRAZENECA CHINA 25TH ANNIVERSARY

Headquarters in

Shanghai



In China since **1993**

Rankings

#2 pharmaceutical multinational company (MNC) in China

AstraZeneca's second-largest national market

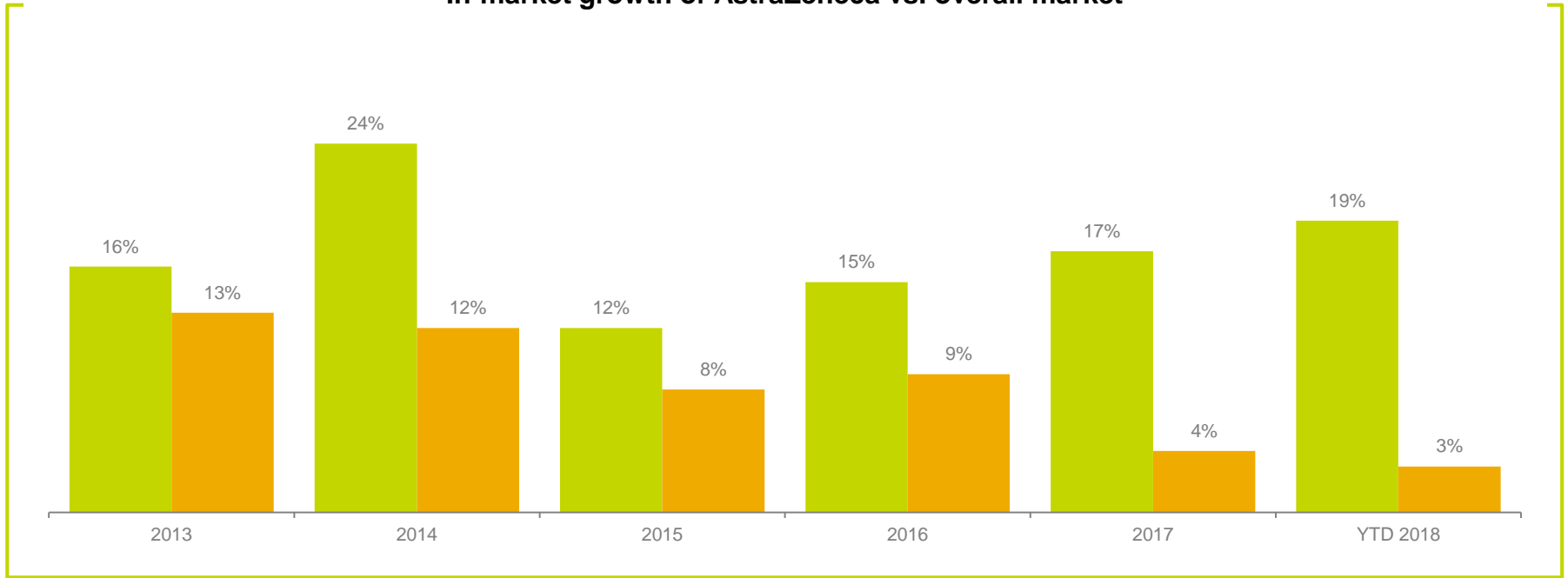
#1 growth rate among MNCs in China for the past several years



Consistently outperforming the China market...



In-market growth of AstraZeneca vs. overall market



AstraZeneca Overall market

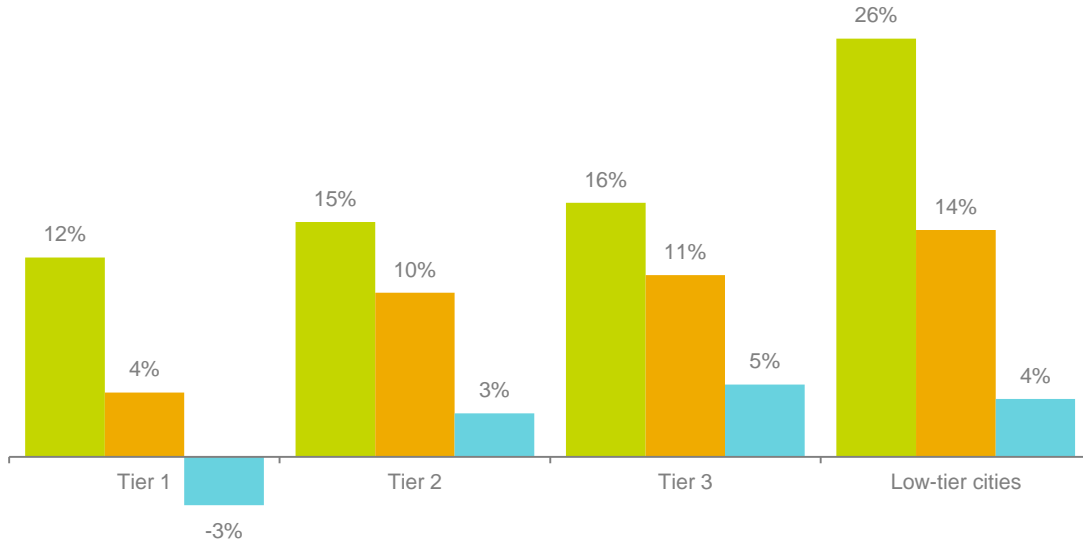
Source: IQVIA.



...across all city tiers



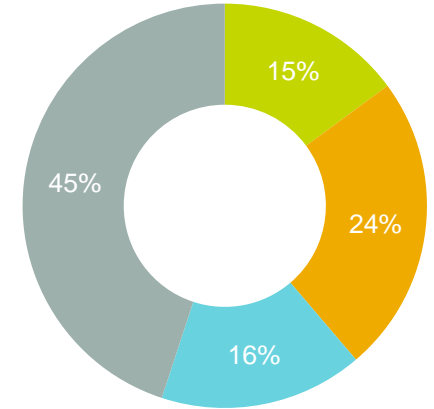
In-market growth of AstraZeneca vs. peers and overall market by city tier



AstraZeneca MNCs Overall market

Source: IQVIA.

Distribution of city tiers by total in-market hospital sales



Tier-1 cities Tier-2 cities Tier-3 cities Low-tier cities



...and in all therapy areas



Oncology



Market share **8%**

Share growth **+0.8%**

#3 company with fastest growth



CVRM



CV market share **10%**

Diabetes market share **3%**

Share growth **+0.9%**

Share growth **+1.8%**

#3 company with fastest MNC growth



Respiratory



Market share **45%**

Share growth **+1.5%**

Market leader; all medicines gaining share

Other



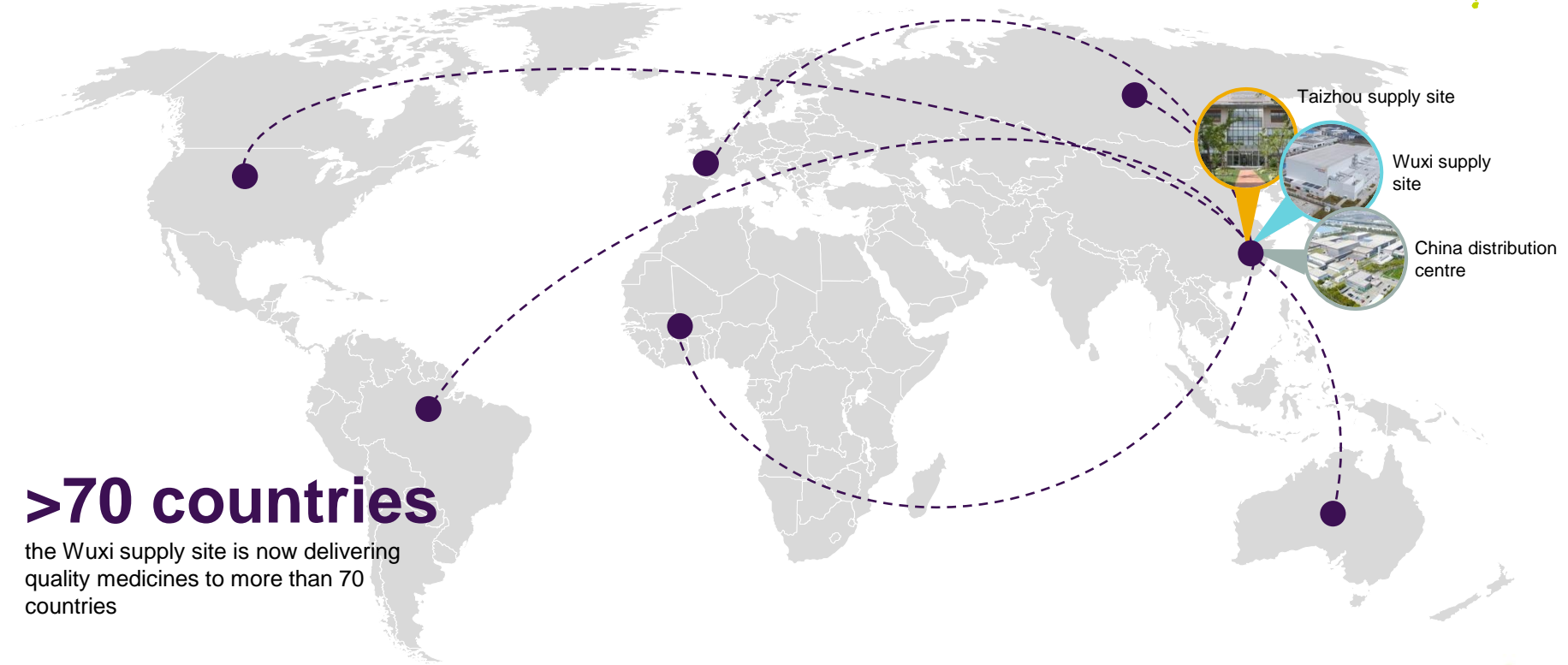
Market share **12%**

Share growth **+1.0%**

#2 company



Underpinned by a quality supply chain



Taizhou supply site

Wuxi supply site

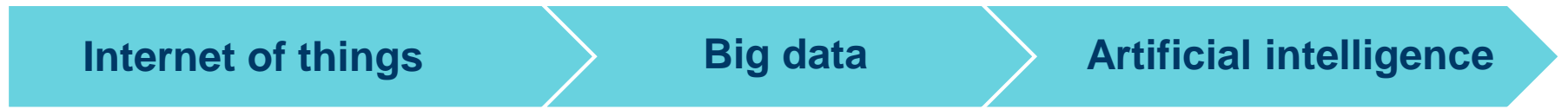
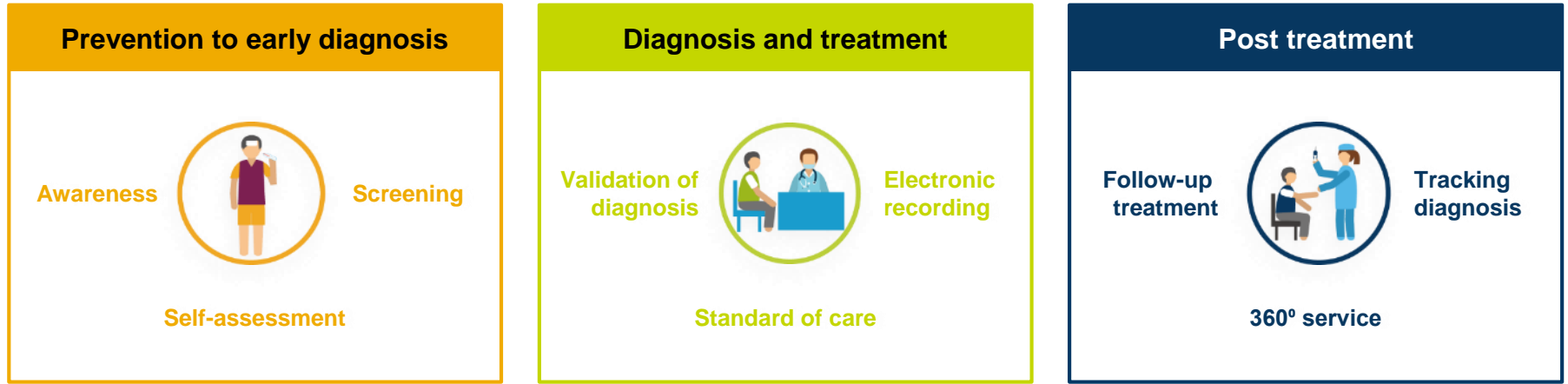
China distribution centre

>70 countries

the Wuxi supply site is now delivering quality medicines to more than 70 countries



Patient-centric, holistic disease management



China Innovation Centre: multiple, fully-integrated ecosystem models for the main therapy areas



Chronic disease management centre

41 centres



China chest-pain centre

669 centres



Metabolic-management centre

200 centres



Gastrointestinal cancer centre

45 centres



Integrated centre for lung-cancer treatment

Pilot stage



Integrated centre for prostate-cancer diagnosis and treatment

77 centres



Paediatric nebulisation centre

15,000 paediatric nebulisation centres
(including 2,100 smart centres)



Pulmonary and critical-care medicine

191 centres



At the forefront of local innovation



AstraZeneca - Chinese SDIC¹ Fund Joint Venture (Nov 2017)



AZD4205 (JAK1 inhibitor)

- Non-small cell lung cancer and Crohn's disease

AZD2954 (undisclosed target)

- Clinical candidate for the treatment of CKD²

Pre-clinical respiratory programme

Additional pre-clinical programmes (oncology and autoimmunity)

Local category-1 partnerships

Oncology



- Co-development of savolitinib (c-Met³ inhibitor), including in combination with *Tagrisso*



- Out-licensed AZD3759 (EGFR⁴ inhibitor) - non-small cell lung cancer

CVRM



- Roxadustat - chronic kidney disease (regulatory decision December 2018)

Other



- MEDI5117 (anti-IL6 mAb) - rheumatoid arthritis

1. State Development & Investment Corporation.
2. Chronic kidney disease.

3. Tyrosine-protein kinase Met (or hepatocyte growth factor receptor).
4. Epidermal growth factor receptor.



China: Oncology strategy



Lead in lung and prostate cancer

Lung cancer

- Continue *Iressa* expansion
- *Tagrisso* 2nd line following NRDL inclusion and 1st-line launch readiness
- *Imfinzi* Stage III and Stage IV (PEARL trial)

Prostate cancer

- Continue to shape the market and address unmet medical needs
- *Lynparza* (PROfound, PROpel trials)

Accelerate breast and ovarian cancer

- *Faslodex* uptake following NRDL
- *Zoladex* ovarian function suppression
- *Lynparza* 1st/2nd line (SOLO-1/2 trials)

Build haematology and gastro-intestinal cancer

- *Calquence* mantle cell lymphoma, chronic lymphocytic leukaemia
- *Imfinzi* liver cancer (HIMALAYA trial)

- Shape the market and address unmet medical need
- Integrated centre for lung-cancer treatment
- Prostate cancer integrated diagnosis and treatment centres



China: CVRM strategy



Strong CV base

- Strong foundation with *Seloken* and *Crestor* to expand to county hospitals, CHCs and retail
- Fully-integrated ecosystem
- Continue to roll out and upgrade chest-pain centres and metabolic-management centres to reshape the patient journey

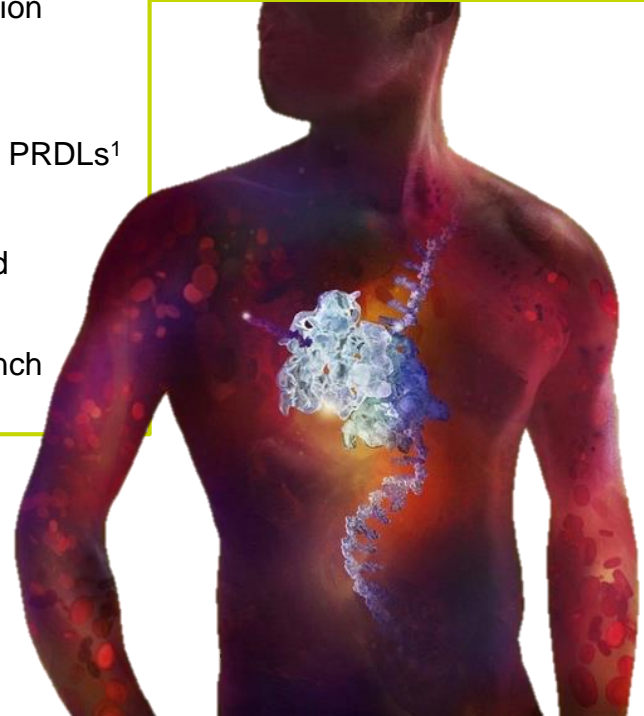
New CVRM

Brilinta: uptake and expansion following NRDL

Diabetes

- *Forxiga* entered into eight PRDLs¹
- *Onglyza* gaining share
- Broad endocrinologist and cardiologist coverage

Roxadustat: first global launch



1. Provincial Reimbursement Drug Lists.



China: Respiratory strategy



Maximise nebulisation coverage across China

- Expand outpatient department nebulisation capacity
- Optimise patient nebulisation experience

Accelerate development of the respiratory maintenance market

- Shape market environment to address low diagnosis, standard-of-care treatment and compliance

Launch readiness: *Bevespi*, PT010, *Fasenra* and tezepelumab



China: strategy



Expansion

- Portfolio selling
- Retail
- Customer base
- Market access



Innovation

- Patient-centric, fully-integrated ecosystems
- New-medicine localisation
- Medicine development and launch acceleration



Partnership

- Central and local government
- Business development
- Local healthcare providers
- Local capital markets



Agenda



Emerging Markets



China



Oncology



CVRM



Respiratory

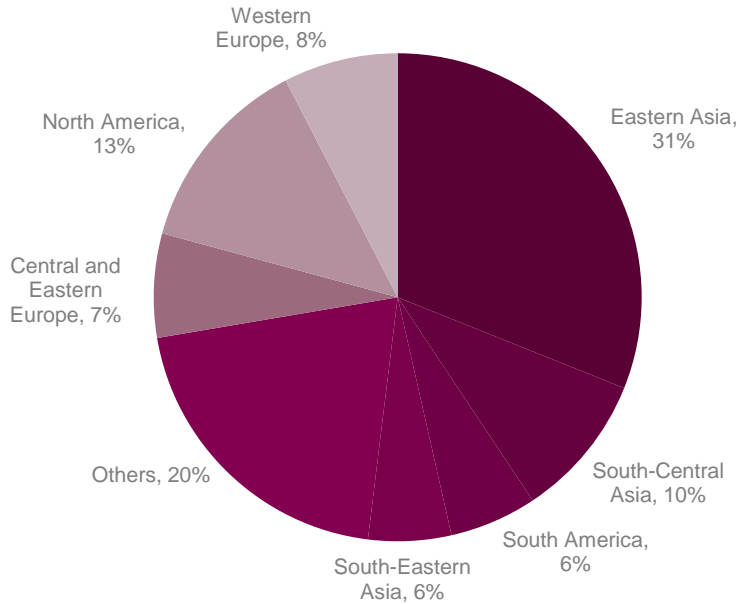


Closing and Q&A



Oncology: annual cancer incidences

c.75% of new cancers in Emerging Markets



c.13 million

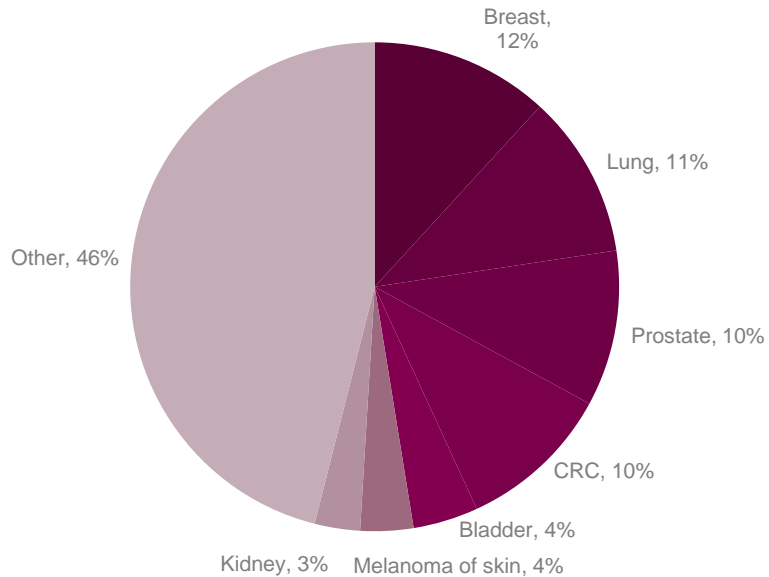
cases annually in
Emerging Markets



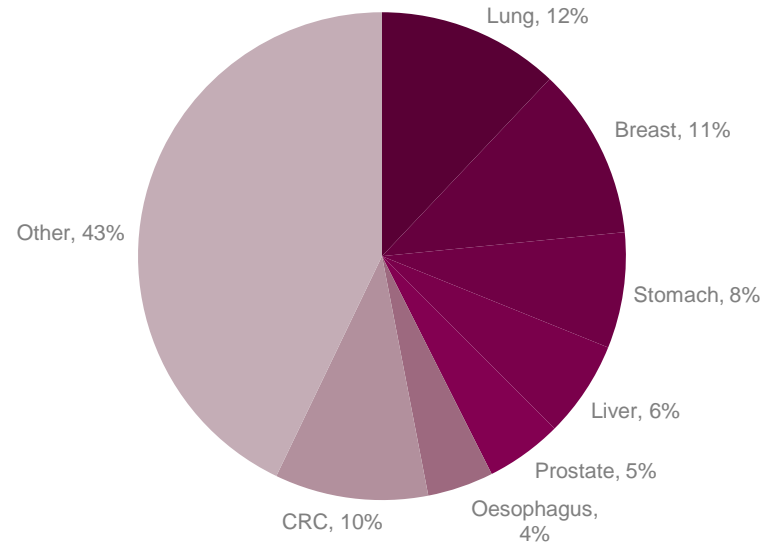
Oncology: lung and breast cancer highest incidence

EMs have high rates of stomach, liver and HNSCC¹ cancers

US, EU, Australia



Emerging Markets



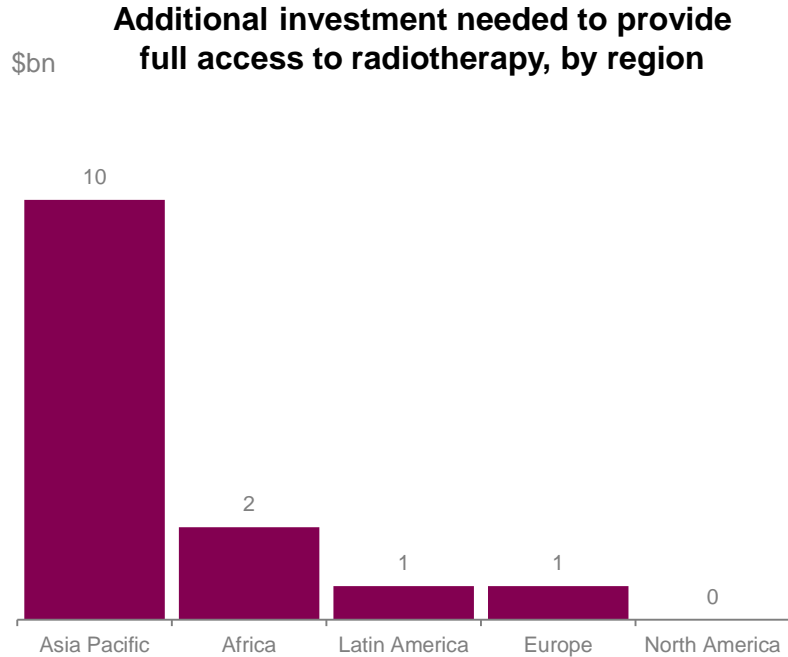
1. Head and neck squamous cell carcinoma.
Source: GLOBOCAN 2018.

2. CRC = colorectal cancer.



Oncology: lack of healthcare infrastructure

Example: different availabilities of radiation therapy



Source: E. Zubizarreta et al., Clinical Oncology 29 (2017), 84e92.



Examples: AstraZeneca improves access to care

Partnering to improve treatments across Emerging Markets



Healthcare education

Developing multidisciplinary teams to improve patient outcomes

- Brazil: expansion of multidisciplinary team
- Mexico: focus on faster diagnosis and ongoing medical education

Diagnostic education

- India: partnership with medical societies on improving re-biopsy capability

Driving scientific exchange through congresses/summits:

- Latin America, Asia, Middle East/Africa



Infrastructure build

Diagnostic infrastructure and networks

- India: genetic counselling for ovarian cancer patients
- Russia: diagnostic capability to deliver precision medicine
- Mexico: EGFR and T790M¹ testing for lung-cancer patients
- Latin America: lab quality-assurance schemes to improve quality of testing

Evidence generation: regional/local

- Regional KINDLE trial
- 62 active ESR² trials in region and registrational trials in 21 countries



Improving access

Multiple compassionate and affordability programmes

- Mexico: access to *Iressa* and *Tagrisso* treatment through subsidised access programmes
- Malaysia: subsidised access to *Imfinzi* with beyond-the-treatment patient support programme e.g. nutrition
- *Imfinzi* early access program across 21 countries

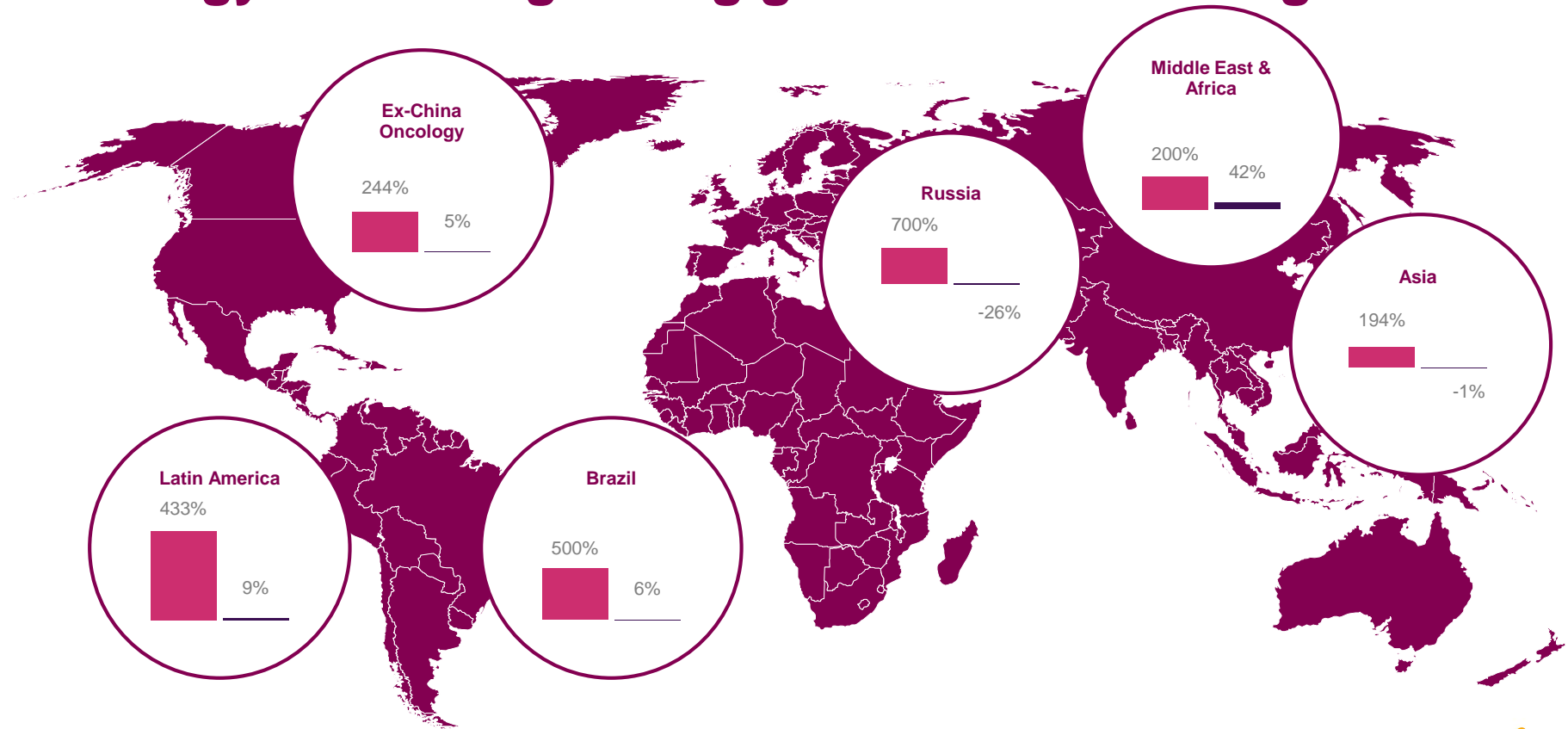
Fast access to reimbursed markets

- South Korea: *Tagrisso* fast approval (5.5 months from application), listing with fast reimbursement and highest revenue in market

1. Substitution of threonine (T) with methionine (M) at position 790 of exon 20 mutation.
2. Externally-sponsored scientific research.



Oncology: delivering strong growth across all regions



Oncology growth (Lynparza, Tagrisso, Imfinzi, Calquence) Legacy oncology growth (Faslodex, Zoladex, Iressa)
Product sales YTD 2018.



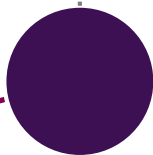
**Oncology:
accelerating access to
meet unmet medical
need**



Oncology: regulatory approvals and reimbursement accelerating

3+ years

usual time to gain approval for a new medicine post US FDA approval

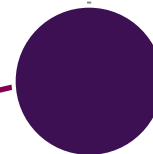


Regulatory approval progress

- Brazil first global approval of *Tagrisso* for 1st-line use
- UAE second global approval for *Calquence*

3+ years

usual time to gain access in reimbursed markets and limited access in self-paid markets



Reimbursement

Early success in many markets



Lung cancer

Leader in EGFR lung cancer and emerging in Immuno-Oncology

Iressa

- Remain market leader across Asia
- Continue to expand access
- Establish sustainable and quality-testing capabilities



Tagrisso

- First-in-world approval achieved in Brazil for 1st-line use
- Continue to expand access
- Establish sustainable and quality-testing capabilities



Imfinzi

- Expanding access through patient-access programmes
- Support establishing systems of care to support Stage III lung-cancer care
- Six regulatory approvals and expanding



**Expanding to further indications
across Emerging Markets
including bladder, liver and other
cancers**



Lynparza

The first PARP inhibitor and the undisputed market leader

2nd-line ovarian cancer

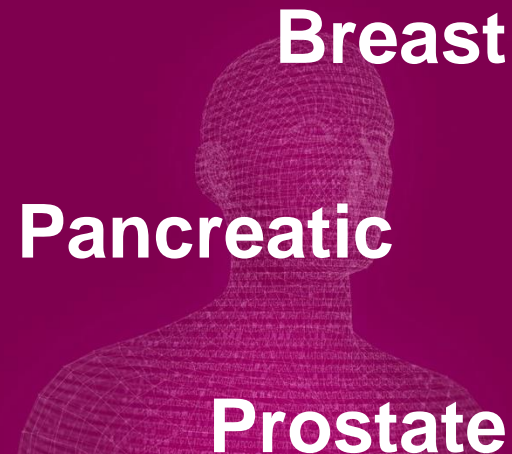
- Established market leadership
- Expand access
- Quality and sustainable *BRCA* testing



1st-line ovarian cancer

- Expand to 1st-line ovarian cancer
- Broaden ability to test for *BRCA* and expand access
- Ambition to make regulatory submissions across Emerging Markets and as quickly as possible

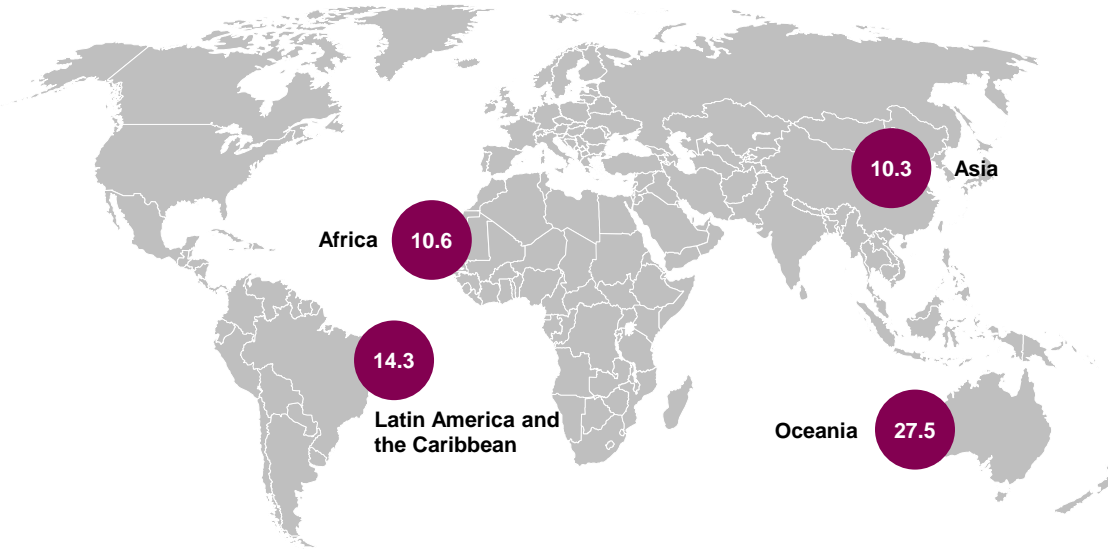
Expand to other cancers



Haematology

Expand beyond US with first launch of *Calquence*

Lower incidence of leukaemia across Emerging Markets, yet still unmet medical need
(Age-standardised rates incidence of blood cancers per 100,000 people)



Regulatory status

Nov 2018

regulatory approval received in UAE

First

approval in Emerging Markets and second approval globally

Source: Hodgkin lymphoma, leukaemia, multiple myeloma, non-Hodgkin lymphoma; both sexes, all ages; age-standardised rates per 100,000 people. GLOBOCAN 2018.



Oncology: sources of innovation

Innovation focus on improving patient access, outcomes and care

- Timely diagnosis and disease awareness
- Physician and allied health education and systems of care
- Extending care beyond urban setting to regional areas
- Improved access to innovative medicines



Agenda



Emerging Markets



China



Oncology



CVRM



Respiratory



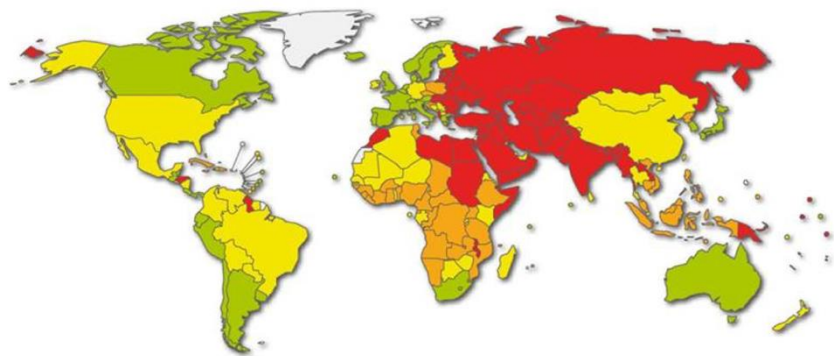
Closing and Q&A



CVRM: high unmet medical need in Emerging Markets

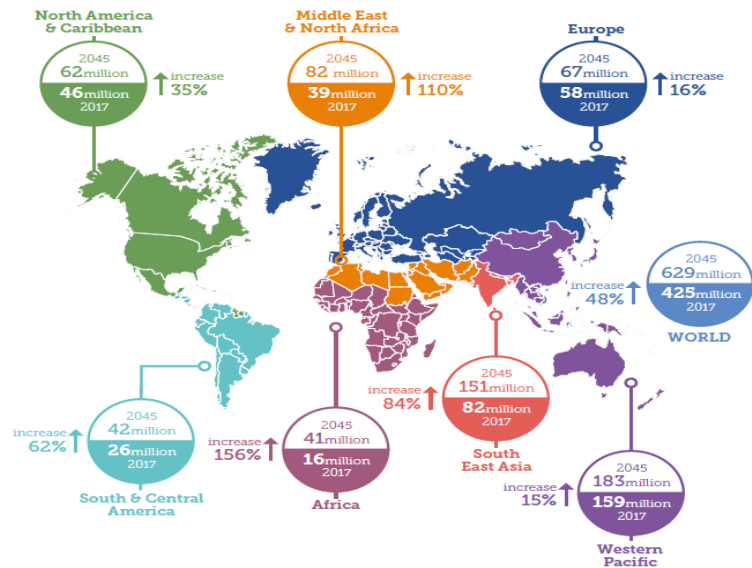
CV diseases are the #1 cause of death globally

Ischemic heart disease mortality rates (age standardised, per 100,000)



- Ischemic heart disease mortality (100,000)
- 12-74
 - 75-108
 - 109-151
 - 152-405
 - Data not available

Number of patients with diabetes worldwide and per region in 2017 and 2045 (age 20-79)

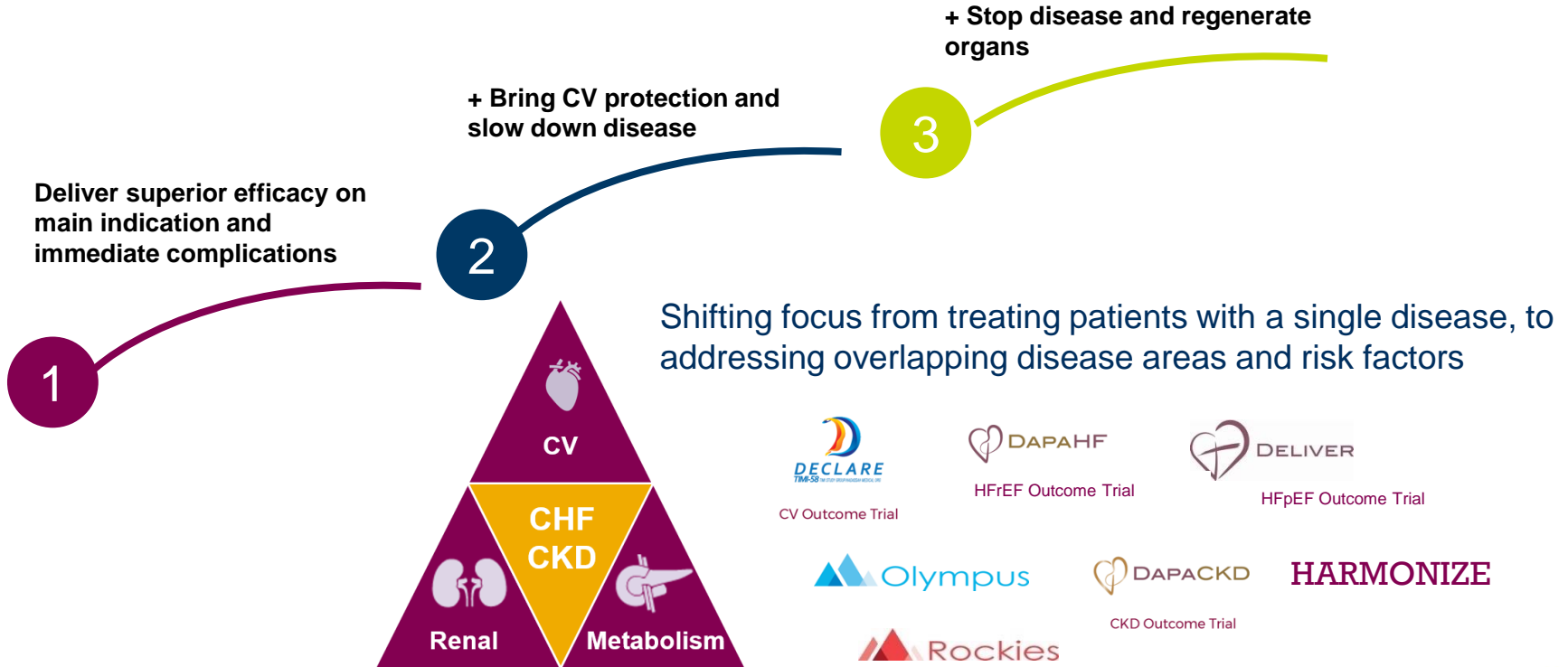


Source: WHO 2011.

Source: IDF, Diabetes Atlas, 2015.



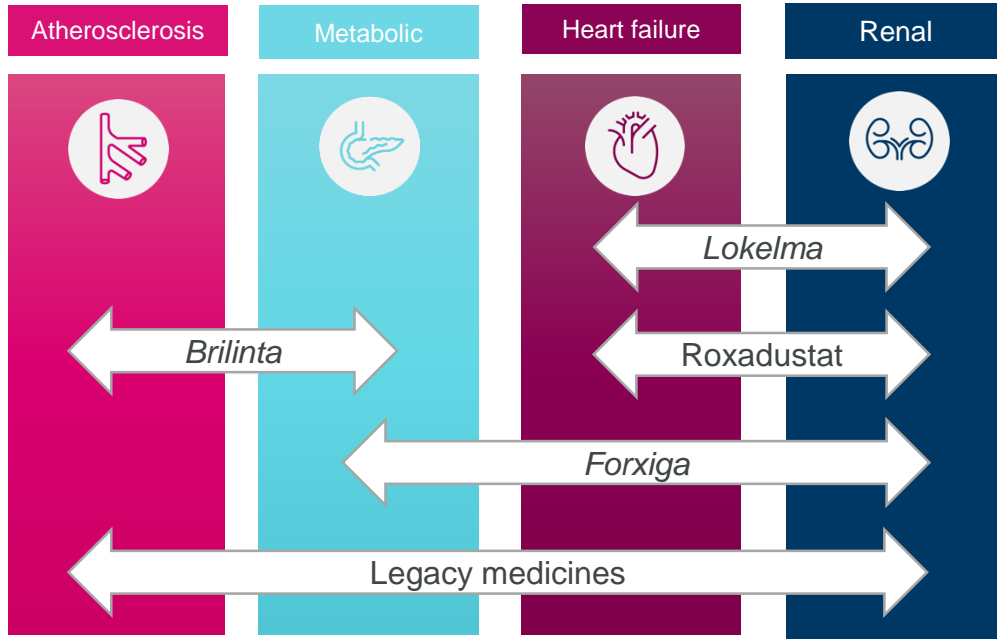
CVRM: changing clinical practice today, pushing boundaries of science tomorrow



CHF = Chronic heart failure.



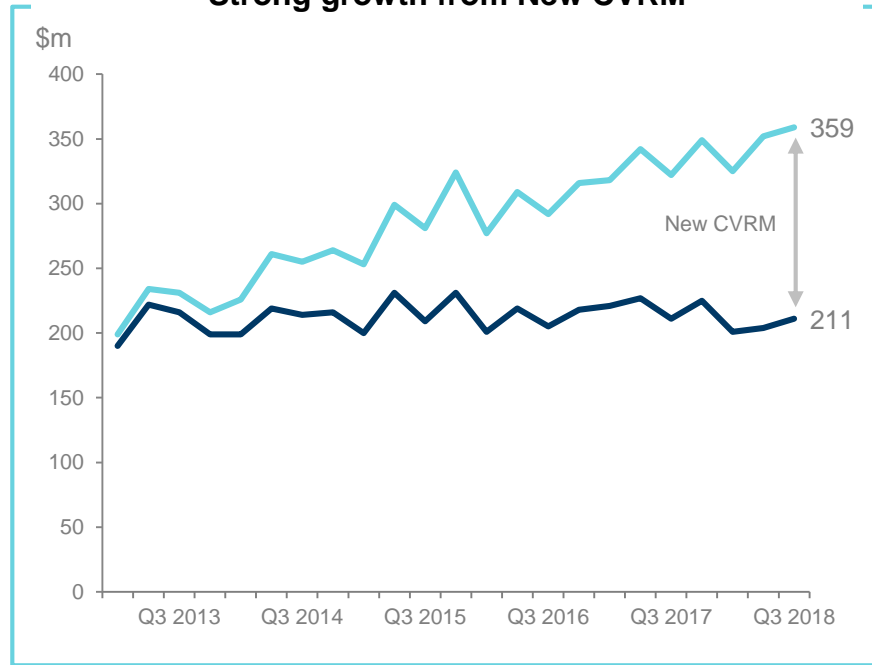
CVRM in Emerging Markets: improve outcomes, address disease overlap with both legacy and new medicines



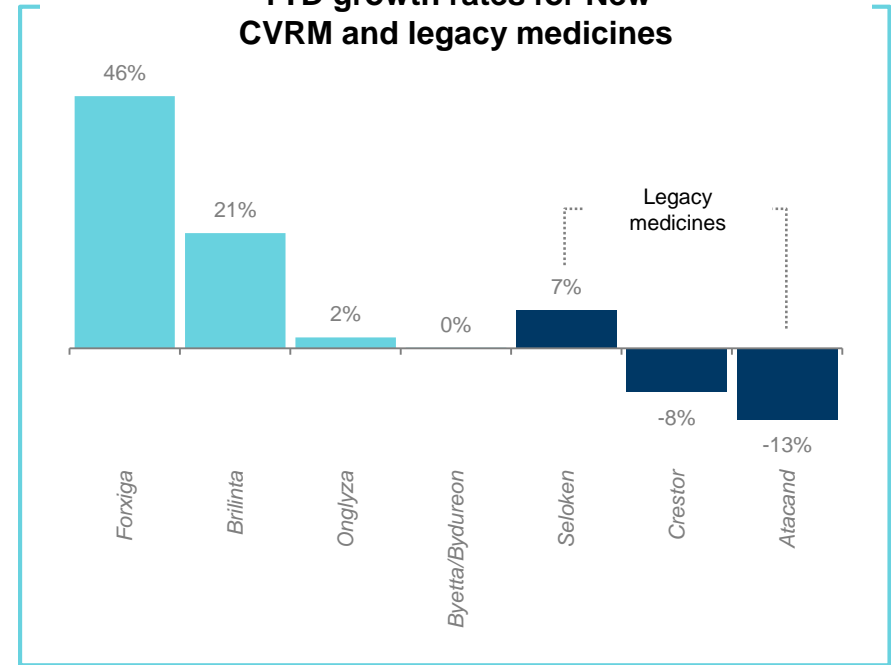
CVRM: legacy medicines and New CVRM

Legacy medicines provide stable base business

Strong growth from New CVRM



YTD growth rates for New CVRM and legacy medicines



Total CVRM Legacy medicines
Product sales in Emerging Markets ex-China at CER.

Product sales changes in Emerging Markets ex-China at CER for YTD 2018.

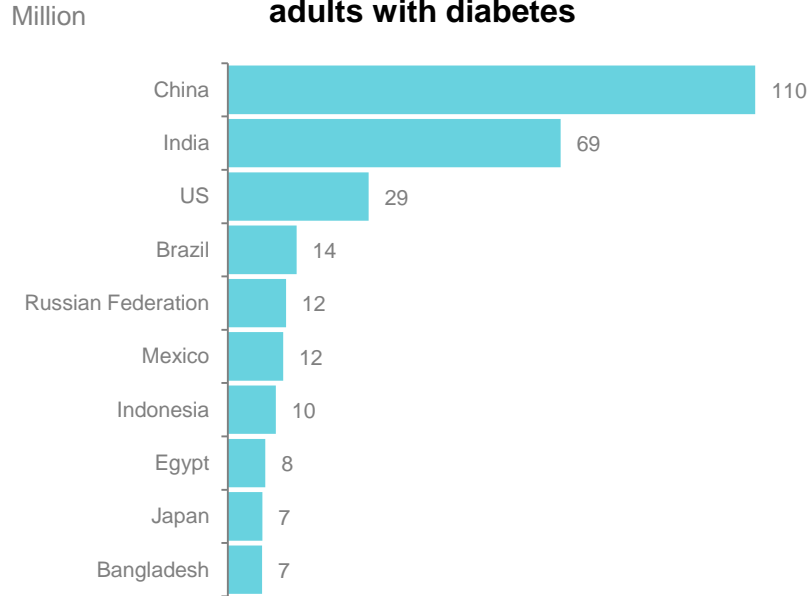


Forxiga: potential in Emerging Markets

Leveraging AstraZeneca's presence

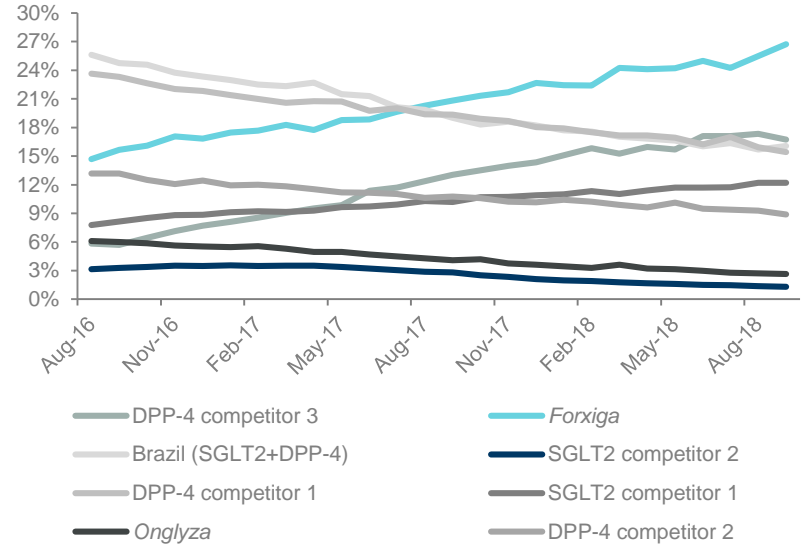


Top-ten countries of adults with diabetes



Source: IDF, Diabetes Atlas, 2015.

Example: in Brazil, Forxiga is the largest-selling oral, innovative anti-diabetic medicine



Source: IQVIA, pharmacy sales, retail and hospital where available, YTD August 2018.



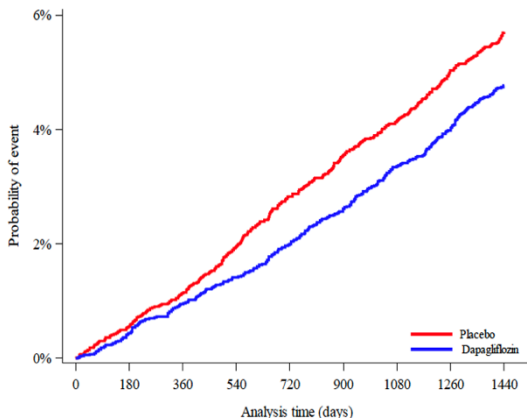
Forxiga: potential in Emerging Markets

DECLARE trial provides potential to change T2D¹ treatment



DECLARE met one of two primary endpoints (CVD²/hHF³)

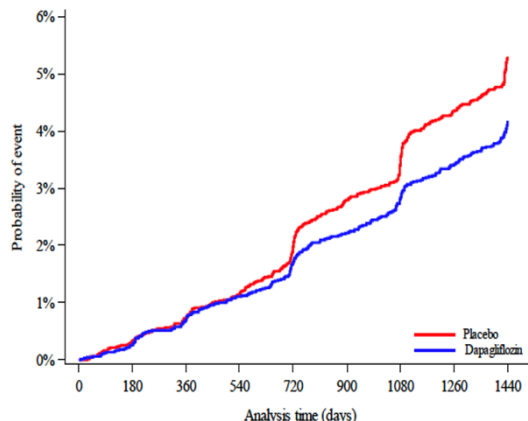
4.9% vs 5.8%
HR⁴ 0.83 (0.73-0.95)
P(Superiority) 0.005



Secondary endpoints not formally tested, but showed positive trend

Renal composite endpoint (40%↓
eGFR⁵, ESRD⁶, renal or CV death)

4.3% vs. 5.6%
HR 0.76 (0.67-0.87)
P<0.001



DECLARE paving the way in cardio-renal for Emerging Markets

- Forxiga launched in >55 Emerging Markets outside of China
- Lifecycle opportunities: HF⁷ and CKD data readout anticipated in 2020



1. Type-2 diabetes 2. Cardiovascular death
3. Hospitalisation for heart failure 4. Hazard ratio.
Source: AHA 2018.

5. Estimated glomerular filtration rate 6. End-stage renal disease.
Source: AHA 2018.

7. Heart failure.



Brilinta: TREAT provides the opportunity to bring benefit to STEMI patients treated with fibrinolytic therapy in EMs

Unmet medical need

- Prior to TREAT, no large-scale trials evaluating safety and efficacy of *Brilinta* in STEMI¹ patients undergoing fibrinolysis
- Access to timely PCI² is often not available, particularly in low and middle-income countries

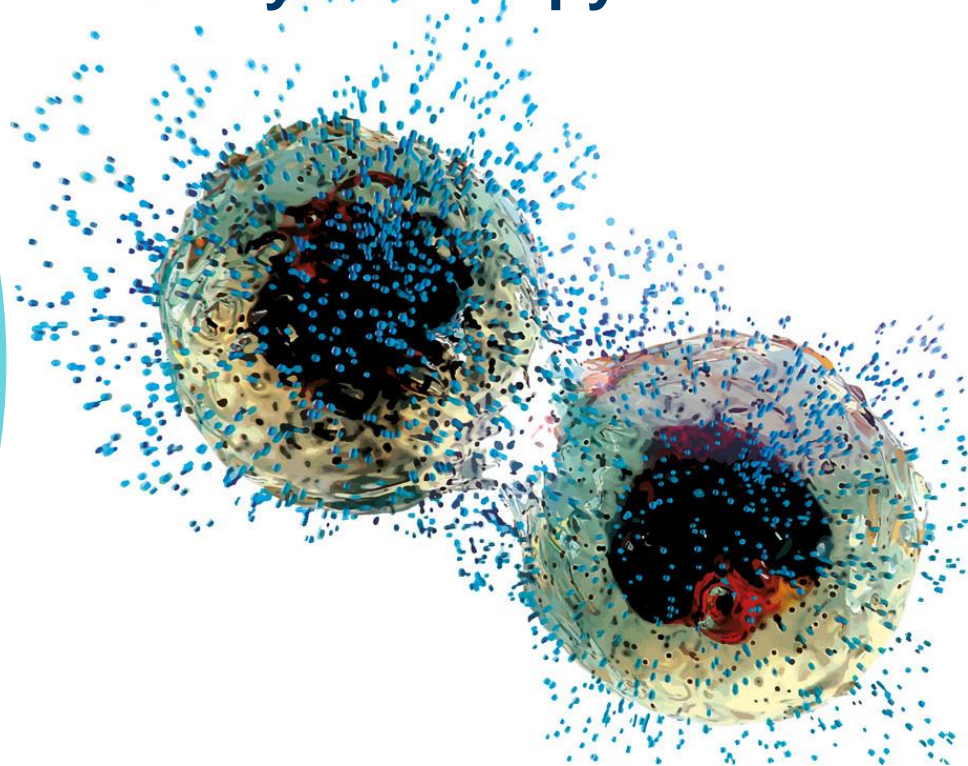
From ESR to Phase III trial

- Conducted in 10 countries and 3,799 patients
- Results presented at ACC 2018; published simultaneously in *JAMA Cardiology*

Results impacting local practice

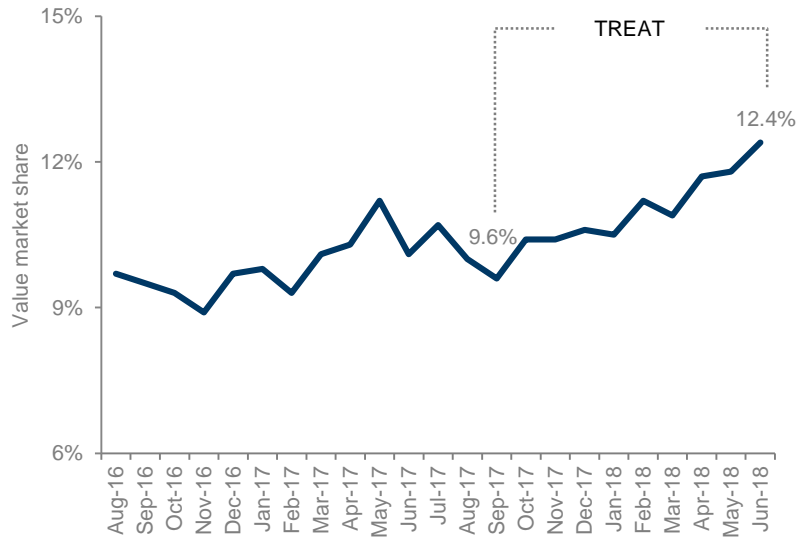
- Russia: 90% of hospitals and ambulance algorithms updated
- Egypt: ACS³ guidelines changed to endorse *Brilinta* usage in STEMI lysis
- Indonesia: 2018 Indonesian Heart Association ACS guideline updated
- Malaysia: included in State Protocol

1. ST elevation myocardial infarction.
2. Percutaneous coronary intervention.
3. Acute coronary syndrome.

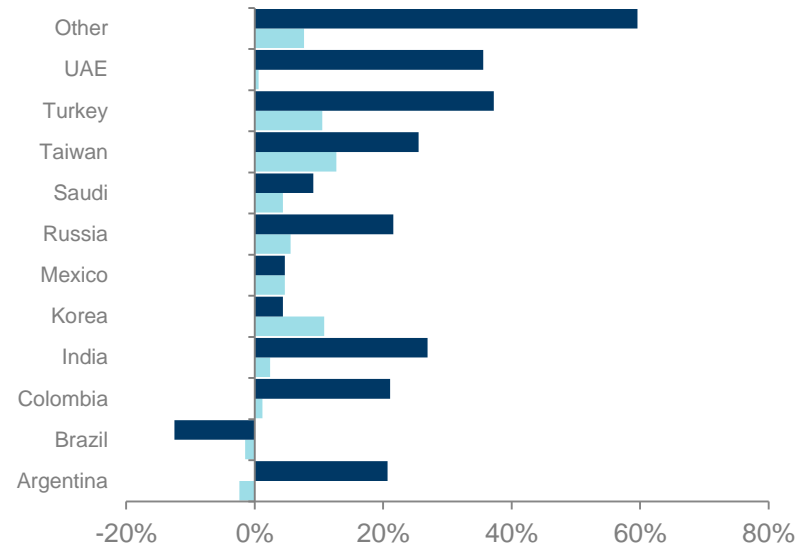


Brilinta: market share continues to grow

Strong increase in value share, potential to further improve with expansion and new launches



**Outperforming market growth
(Brilinta & OAP¹ market growth YTD 2018)**



Source: IQVIA.



Lokelma

Asia has more than 20 million patients with a life-threatening complication, like hyperkalaemia in CKD

HARMONIZE-Global

regulatory submissions in Russia,
Taiwan and South Korea

HARMONIZE-Asia

data readout in H2 2019

2020

China regulatory submission



We follow the science: CKD and roxadustat

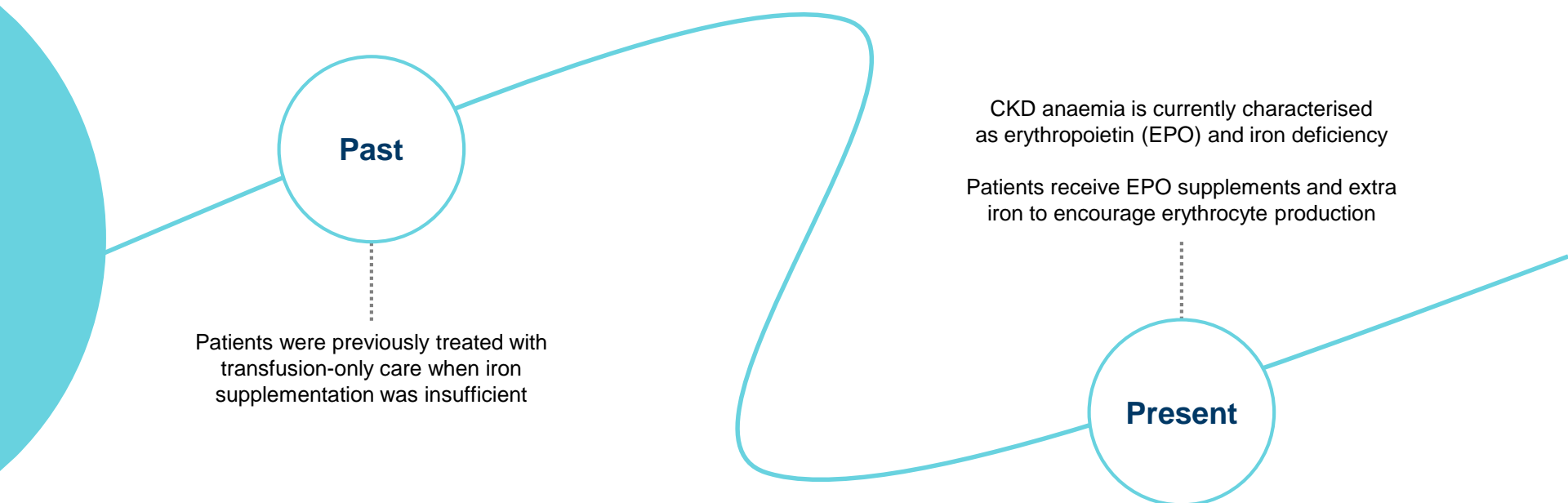
>40 million
patients in Asia have
chronic kidney disease

Past



We follow the science: CKD and roxadustat

Roxadustat: potential to transform the treatment of anaemia in CKD



Treating CKD anaemia enables the body to stimulate complete erythropoiesis

Future

Hypoxia-inducible factor prolyl hydroxylase (HIF-PHI) inhibitor



- Overcomes defective oxygen sensing
- Stimulates EPO production
- Mobilises iron
- Body coordinates EPO and iron
- Stimulates endogenous production of erythrocytes

Roxadustat
China regulatory decision
anticipated Q4 2018



Agenda



Emerging Markets



China



Oncology



CVRM



Respiratory



Closing and Q&A



Respiratory

Asthma and COPD prevalence growth highest in low-income areas

339 million¹
patients worldwide
affected by asthma

384 million²
patients worldwide
affected by COPD

Seven³
patients die every 10 minutes
as a result of asthma

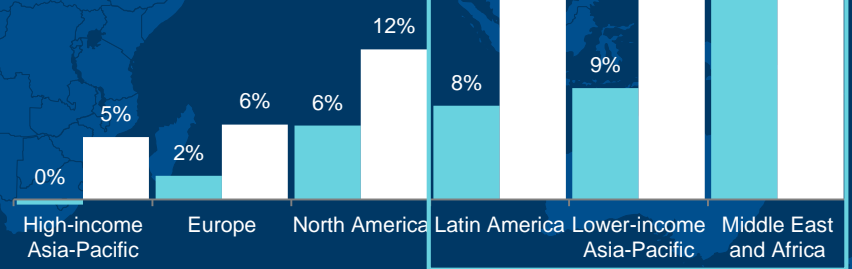
Third⁴
COPD third-largest
cause of death by 2020

One⁵
asthma is the leading chronic
disease in children

70%⁶
COPD patients underdiagnosed
in the primary-care setting

● Asthma
● COPD

Chart: growth of
diagnosed prevalent
cases of asthma and
COPD over the period
2017-2027 by world
region



Source: 1. The Global Asthma Network. The Global Asthma Report 2018. [Online]. Available at: http://www.globalasthmanetwork.org/publications/Global_Asthma_Report_2018.pdf. Last accessed: October 2018. Chanez P, Humbert M. European respiratory review: Asthma: still a promising future? European Respiratory Review. 2014; 23 (134) 405-407. 2. Adeloje D, Chua S, Lee C, et al; Global Health Epidemiology Reference Group (GHERG). Global and regional estimates of COPD prevalence: Systematic review and meta-analysis. J Glob Health. 2015;5(2): 020415. 3. AstraZeneca calculation based on <https://www.who.int/news-room/fact-sheets/detail/asthma>. 4. GOLD. Global Strategy for the Diagnosis, Management and Prevention of COPD, Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2018. [Online]. Available at: <http://goldcopd.org>. Last accessed: October 2018. 5. <https://www.who.int/respiratory/asthma/en/> and Int J Tuberc Lung Dis. 2014 Nov;18(11):1269-78. doi: 10.5588/ijtld.14.0170. 6. Am J Respir Crit Care Med. 2018 Nov 1;198(9):1130-1139.



Respiratory: Emerging Markets strategy

Building on a long-term commitment to respiratory disease



Expansion

- Acute standard of care and AstraZeneca's respiratory leadership beyond China



Address

- SABA over-reliance in asthma
- Exacerbations in asthma and COPD
- Diagnosis and treatment in COPD



Transform

- Patient outcomes by delivering a differentiated biologics portfolio



Symbicort

Pulmicort

Bevespi / PT010



Fasenra

Healthy Lung programme

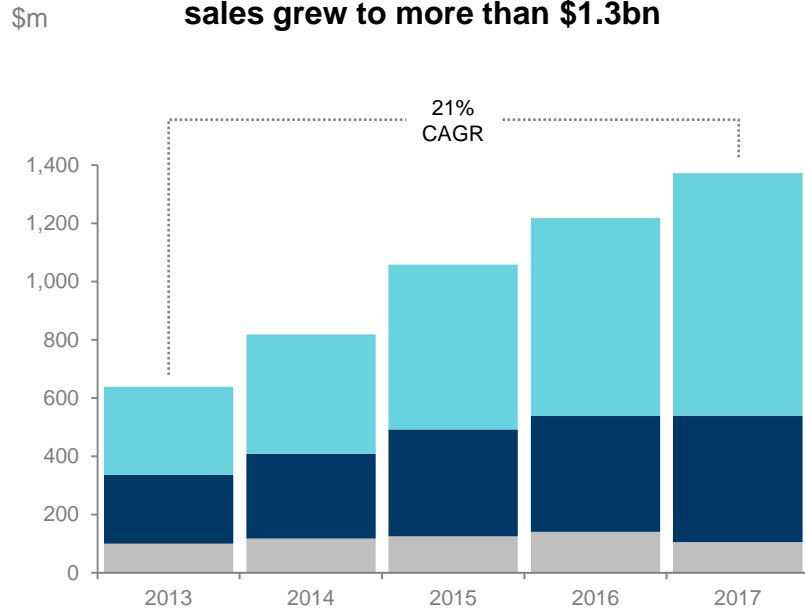
Created to raise the profile of disease with policymakers and build health-system capacity to better serve patients



Respiratory: sales in Emerging Markets

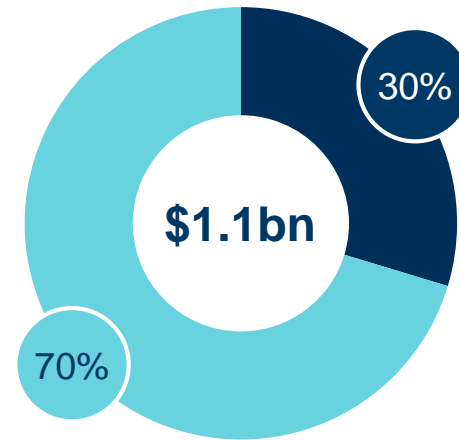
Pulmicort sales underpin overall respiratory growth

FY 2017: Respiratory product sales grew to more than \$1.3bn



Pulmicort Symbicort Other Respiratory medicines

YTD 2018: ex-China markets represent 30% respiratory sales growth in Emerging Markets

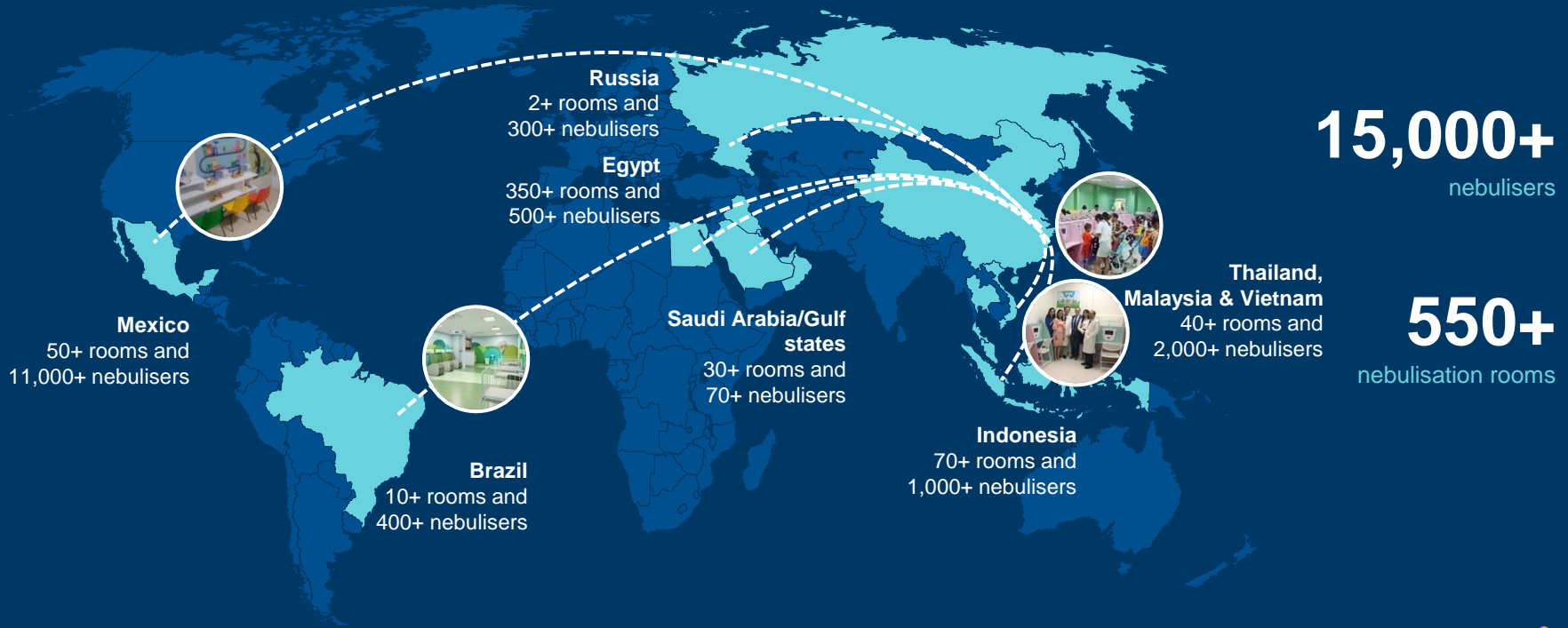


China Emerging Markets ex-China



Respiratory: expanding nebulisation centres

Transforming the standard of care for children in Emerging Markets



Source: AstraZeneca data.



Respiratory: following the science to drive early adoption

Symbicort: SYGMA data demonstrates use as an anti-inflammatory reliever therapy

three times

more likely to receive SABA¹ vs. ICS/LABA²

- Over-reliance on rescue inhalers (SABA); significantly impacts exacerbations and increases mortality
- Enables earlier use across the asthma GINA³ steps

Chinese guidelines updated to incorporate SYGMA data

Increase rates of diagnosis and treatment of COPD patients

70%

of patients are underdiagnosed

- KRONOS trial demonstrated PT010 reduced the risk of exacerbation vs. LAMA/LABA¹

PT010 regulatory submission (CN)

Fasenra: the potential of biologics in severe asthma

80-85%¹

of all asthma deaths occur in uncontrolled severe asthma

- Severe uncontrolled asthma patients 10x higher risk of hospital stays²
- *Fasenra* has a strong clinical profile to address needs

Three launches of *Fasenra* in 2018 in Emerging Markets

1. Short-acting beta agonists 2. inhaled corticosteroid and long-acting beta2 agonist 3. Global Initiative for Asthma.
Source: IQVIA sales. Overall SABA vs ICS/LABA volume.

1. Long-acting muscarinic antagonist /long-acting beta2 agonist.
Source: Am J Respir Crit Care Med. 2018 Nov 1;198(9):1130-1139.

Source: 1. Stephen P. Peters et al. Respiratory Medicine (2006) 100, 1139-1151. 2. Fernandes AG et al, J Bras Pneumol. 2014; 40(4): 364-372.



Partnering with governments to build and strengthen health systems for improved care in respiratory disease

Increase in number of nebulisation rooms



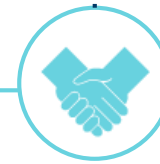
Patient access



Innovation

FAZBEM patient programme

Memorandum of understanding (Singapore, Indonesia, India, Thailand)

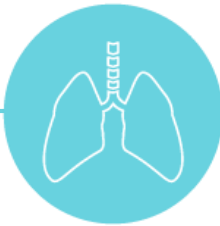


Partnership



Healthy Lung

Asia



Partnerships



Skills



Capacity and access



Agenda



Emerging Markets



China



Oncology



CVRM



Respiratory



Closing and Q&A



Significant opportunity to continue to drive growth

Emerging Markets are key to AstraZeneca's transformation

- **China**
 - Significant favourable macroeconomic and demographic trends
 - The importance of legacy and primary-care medicines
 - A perfectly-relevant portfolio of medicines - in market now and more to be launched
 - Leading in technology, expertise and scale
- **Emerging Markets**
 - A unique contribution to global sales
 - Addressing large unmet medical needs
 - Breadth and depth across all regions
 - A focus on three therapy areas delivering significant returns
- **Continue to support return to growth; deliver earnings; and cash flow**
- **Reiteration of China and Emerging Markets long-term revenue target**



Q & A



Appendix



China National Essential Drug List

2018 inclusions

Therapy area	Medicine	International non-proprietary name
Oncology	<i>Iressa</i>	gefitinib
CVRM	<i>Brilinta</i>	ticagrelor
CVRM	<i>Forxiga</i>	dapagliflozin
CVRM	<i>Crestor</i>	rosuvastatin
CVRM	<i>Imdur</i> ¹	isosorbide
CVRM	<i>Plendil</i> ¹	felodipine
CVRM	<i>Zestril</i> ¹	lisinopril
Respiratory	<i>Pulmicort</i>	budesonide
Respiratory	<i>Symbicort</i>	budesonide / formoterol
Other	<i>Naropin</i> ¹	ropivacaine

2012 inclusions

Therapy area	Medicine	International non-proprietary name
CVRM	<i>Betaloc</i>	metoprolol
Other	<i>Diprivan</i> ¹	propofol
Other	<i>Losec</i>	omeprazole
Other	<i>Nexium</i>	esomeprazole
Other	<i>Seroquel</i> ¹	quetiapine

¹. Externalised or divested medicine.



China National Reimbursement Drug List

Year	Therapy area	Medicine	International non-proprietary name
2018	Oncology	<i>Tagrisso</i>	osimertinib
2017	Oncology	<i>Faslodex</i>	fulvestrant
2017	Oncology	<i>Iressa</i>	gefitinib
2017	CVRM	<i>Brilinta</i>	ticagrelor
2017	CVRM	<i>Onglyza</i>	saxagliptin
2017	Other	<i>Seroquel XR</i> ¹	Quetiapine
2009	CVRM	<i>Betaloc ZOK</i>	metoprolol
2009	CVRM	<i>Crestor</i>	rosuvastatin
2009	Respiratory	<i>Symbicort</i> ²	budesonide / formoterol
2009	Other	<i>Nexium</i> ³	esomeprazole
2004	Oncology	<i>Arimidex</i>	anastrozole
2004	Oncology	<i>Casodex</i>	bicalutamide

Year	Therapy area	Medicine	International non-proprietary name
2004	Oncology	<i>Zoladex</i>	goserelin
2004	CVRM	<i>Zestril</i> ¹	lisinopril
2004	Respiratory	<i>Accolate</i>	zafirlukast
2004	Respiratory	<i>Bambec</i>	bambuterol
2004	Respiratory	<i>Bricanyl</i> ²	terbutaline
2004	Respiratory	<i>Bricanyl</i> ⁴	terbutaline
2004	Respiratory	<i>Bricasol</i>	terbutaline
2004	Respiratory	<i>Oxis</i> ⁴	formoterol
2004	Respiratory	<i>Pulmicort</i> ⁴	budesonide
2004	Other	<i>Losec MUPS</i>	omeprazole
2004	Other	<i>Naropin</i>	ropivacaine

1. Externalised or divested medicine 2. Turbohaler 3. Intravenous 4. Respules.



China National Reimbursement Drug List

Year	Therapy area	Medicine	International non-proprietary name
2004	Other	<i>Nexium</i> ²	esomeprazole
2004	Other	<i>Seroquel IR</i> ¹	quetiapine
2000	CVRM	<i>Betaloc</i> ³	metoprolol
2000	CVRM	<i>Betaloc</i> ⁴	metoprolol
2000	CVRM	<i>Imdur</i> ¹	isosorbide
2000	CVRM	<i>Plendil</i> ¹	felodipine
2000	Respiratory	<i>Bricanyl Tab</i>	terbutaline
2000	Respiratory	<i>Pulmicort</i> ⁶	budesonide
2000	Respiratory	<i>Pulmicort</i> ⁶	budesonide
2000	Other	<i>Diprivan</i> ¹	pepofol
2000	Other	<i>Losec</i> ³	omeprazole

Year	Therapy area	Medicine	International non-proprietary name
2000	Other	<i>Losec</i> ⁷	omeprazole
2000	Other	<i>Rhinocort Aqua</i> ¹	budesonide

1. Externalised or divested medicine 2. Capsules 3. Intravenous 4. Plain 5. Aerosol 6. Turbuhaler 7. Capsules.



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China and Emerging Markets

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13 December 2018

