

## Powerful global reach

AstraZeneca has more than 65,000 employees worldwide. About 12,000 are dedicated to R&D at 17 principal R&D centres in 8 countries:

### Small molecules:

UK: Alderley Park/Macclesfield, Charnwood and London  
Sweden: Lund, Mölndal and Södertälje  
US: Boston MA and Wilmington DE  
Canada: Montreal QC  
France: Reims  
India: Bangalore  
China: Shanghai  
Japan: Osaka

### Biologics and vaccines (MedImmune):

US: Gaithersburg MD and Mountain View CA  
UK: Cambridge

## Growing in Asia

We have a strong and growing R&D presence in Asia. Work at our Bangalore research facility in India is dedicated to finding a new therapy for Tuberculosis. At our Innovation Centre China (ICC) in Shanghai, our initial therapeutic focus is on cancer.

## New opportunities

We have over 1000 active collaborations with external partners across the globe and we continue to look for innovation and opportunity within and beyond our existing research areas.

## R&D investment

In 2008 we invested \$5.2 billion into R&D projects.

research & development



We are focused on turning ideas into innovative, effective medicines that make a real difference in important areas of healthcare.

We have a robust and expanding pipeline that includes small molecules, biologics and vaccines.

We have broad access to global scientific expertise; and are involved in many emerging areas of scientific and medical innovation.

[www.astrazeneca.com/research](http://www.astrazeneca.com/research)

**AstraZeneca**   
life inspiring ideas

## Positioned for the future

**AstraZeneca** has a long history of successful research leading to innovative, meaningful medicines.

Together with our premier biologics and vaccines unit, **MedImmune**, we have a robust and expanding pipeline that spans across small molecules, biologics and vaccines. Our joint scientific expertise enables us to select the best technology to tackle disease targets.

### Predictive science

More predictive, scientific tools enable us to gain better understanding of human diseases. Identifying and deploying biomarkers to measure progress of disease and/or the effects of treatment can help making early decisions on the effectiveness and safety of compounds in clinical development. All our compounds nominated for development now have a biomarker strategy.

### Personalised healthcare

Recognising this has become a fundamental component of drug discovery and development today. We have taken positive steps to ensure our drug development projects establish appropriate personalised healthcare plans to provide the right treatment, for the right patients, at the right dose and at the right time.

## Seeking solutions

We devote our skills and resources to finding breakthrough therapies in areas where we believe we have particular scientific insight and expertise.

### Cardiovascular

Arrhythmias  
Atherosclerotic CV Disease  
Diabetes/Obesity  
Thrombosis

### Neuroscience

Alzheimer's Disease  
Analgesia/Chronic pain  
Bipolar Disorder  
Depression/Anxiety  
Schizophrenia

### Gastrointestinal

Gastroesophageal reflux disease (GERD)

### Oncology

A range of tumour types, including  
Breast  
Colorectal  
Haematological  
Lung  
Urology

### Infection

Anti-Bacterials  
Anti-Virals

### Respiratory & Inflammation

Asthma  
Chronic obstructive pulmonary disease (COPD)  
Lupus  
Rheumatic diseases  
Scleroderma

## Where the need is leading us

We focus on diseases with great unmet medical need such as:

**Alzheimer's disease** is affecting approximately 24 million people worldwide today and possibly 40 million by 2020. The key pathophysiological step seems to be amyloid build-up in the brain; reducing or removing it could alleviate the symptoms and stop disease progression.

**Cancer** remains the second highest cause of death in developed countries and accounts for 7.6 million of all deaths worldwide annually. Our oncology pipeline includes both small molecules and biologics that target the signalling pathways believed to be pivotal in cancer cell growth, invasion, and survival, including cell division and the growth of new blood vessels.

**Type 2 diabetes.** Health authorities around the world are increasingly concerned about the rapid rise in the incidence and prevalence of type 2 diabetes and obesity, which are major risk factors for cardiovascular morbidity and mortality. In collaboration with R&D partners, we are developing agents with profiles that reflect the close interrelationship between these two diseases

### Chronic obstructive pulmonary disease (COPD)

is currently, the fifth leading cause of death in the world, estimated to affect over 200 million people. Our early pipeline is strong, combining oral compounds, inhaled compounds and antibodies.

**Infection.** Demand for anti-microbial agents remains high due to escalating bacterial resistance, limitations of available antiviral agents, and the increased risk of serious infections in both immunosuppressed patients and ageing populations. We are well positioned to exploit our structural and genomic-based discovery technologies and our antibody platforms.