Pushing the boundaries of science through Open Innovation
Mission: To push the boundaries of science to deliver life-changing medicines

"Our commitment to making a meaningful difference in healthcare is founded on our innovative science. The pursuit of scientific excellence that addresses unmet patient need guides everything we do."

Pascal Soriot
CEO
Partnering, collaborations and open innovation remain key to pushing the boundaries of science
We are driving science through collaborations...

...more than 90 partnerships in the last three years
To deliver the next generation of medicines we must continue to find ways to combine our science with the best science that’s happening elsewhere.

Challenging ourselves to find new ways to break through the barriers and work more openly with scientists in other organisations who share our passion for patients and who can bring different perspectives to innovative research.
Here are a few of examples of how we are helping to drive Open Innovation across our industry
We have delivered some groundbreaking agreements to be a leader in Open Innovation

- 22 deprioritised AZ compounds
- MRC funding of £10M over 3 years
- 106 applications submitted from 37 UK institutions
- 6 Clinical and 7 pre-clinical funded proposals
- Example - zibotentan repositioned from prostate cancer into Alzheimer's disease
- AZ one of three industry founders
- Program modeled in part after AZ/MRC alliance
- 14 ‘discontinued’ AZ compounds (1 biologic) – all ‘patient ready’
- 3 of 9 projects funded with AZ compound
- 3 additional investigator-sponsored projects spawned later from this program
While Open Innovation initiatives like these will help us to accelerate our pipeline of new medicines.

- Establishing a unique joint centre for research on CVMD
- Integrated Cardio Metabolic Centre located on KI Campus
- Focused on identifying and validating novel targets on three strategic research themes: Cardiac Regeneration, Islet Health (Diabetes) and Diabetic Nephropathy

- 20 compounds
- Including 4 ‘live’ molecules
- Predicted to be:
  - 2 – 4 projects
  - Funding in July 2014
Leveraging compound collections to share to maximise value

Delivering reciprocal access to high quality chemical start points with libraries worth $MMs

Delivering early access to new target ideas and partnerships with academic LG centres, with first right of refusal on targets at LO

Delivering support for neglected disease strategy and sharing libraries to find new medicines for life-threatening neglected diseases
We have also been working pre-competitively with academia and pharma to build scientific knowledge and put the patients first.

- Unique collaboration to establish world-leading translational centre for inflammatory diseases
- Initial investment of £5m from each partner over a 3-year period
- Scientists from industry and academia work together on inflammation research and translational medicine
- Examine how companion diagnostics for cancer can be rolled out across the NHS
- Build a database of tumour genetic information, treatments and outcomes
- Develop a multi-gene panel that can test for genetic markers for drugs already used in the clinic e.g. Iressa
It’s a good start – but to push the boundaries of science we need to do more.

Our new Open Innovation initiative will help us to take the next step.
Open Innovation offerings across all stages of research

Clinical Compound Bank
‘Patient-ready’ compounds with evidence of human target coverage and manageable tolerability are being offered for novel clinical and translational research

Pharmacology Toolbox
Compounds with optimised pharmacological properties are available for preclinical research to explore novel disease biology and advance scientific knowledge

Target Innovation
Do you have an innovative target idea for a drug discovery project? We may be able to help you validate your idea, by providing access to our compound library
Open Innovation offerings across all stages of research

**New Molecule Profiling**
Sophisticated cheminformatic and screening technologies are offered to explore the properties and therapeutic innovation potential of novel compounds.

**R&D Challenges**
To expand our problem solving ecosystem, we are sharing key R&D hurdles and looking to collaborate with and reward those who bring innovative solutions.

**Suggestion Box**
Do you have an idea, technology, or suggestion that fits outside of the above mentioned collaboration offerings?
Accessible through an Open Innovation Website

http://openinnovation.astrazeneca.com
## Why is it Attractive?

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**To push the boundaries of science to deliver life-changing medicines**

**Academics**

- Clinical Compound Bank
- Pharmacology Toolbox
- Target Innovation
- New Molecule Profiling
- R&D Challenges
- Suggestion Box

**AZ**

- New clinically validated projects
- New lead optimization projects
- New targets-hit ID projects
- Access to novel molecules
- Novel solutions
- Ideas for future partnerships
Discover more at openinnovation.astrazeneca.com
A Final Word...

“Creating a more permeable research environment, where scientists share their ideas more freely, collaborate on projects and drive scientific innovation is a key part of achieving scientific leadership for AstraZeneca. We need to find new ways to break through the barriers and work collaboratively with great scientists in other organisations who share our passion for patients and who can bring different perspectives to our research.

Our agreements with the Medical Research Council in the United Kingdom and with the National Institute of Health in the US, are great examples of how we are driving more open innovation in our industry to develop new medicines for Alzheimer’s, cancer, peripheral artery disease and other debilitating and fatal diseases.

Mene Pangalos
EVP, IMED Biotech Unit