

Innovative Medicines Initiative 2: Europe's fast track to better medicines

- Next generation vaccines, personalised medicines and treatments, e.g. new antibiotics;
- Faster roll-out of effective and sustainable healthcare:
- Leveraging funding from the public sector and health and life science industries to meet public health needs;
- Supporting the global competitiveness of Europe's pharmaceutical industry.



What is the challenge?

The huge burden of chronic and degenerative diseases grows as Europe's population gets older. But the risks and costs of developing new vaccines, medicines and treatments are soaring, as is the complexity of diseases and the scientific challenge.

How can the EU provide priority medicines for all and keep public budgets under control? No government, industry sector or research community can overcome these challenges on its own. Cooperation at EU level between the public and private life science sectors is the only way forward.

What is the Innovative Medicines Initiative 2 (IMI2)?

IMI2 is a Joint Technology Initiative (JTI) bringing together companies, universities, public laboratories, innovative SMEs, patient groups and regulators. It will pave the way for breakthrough vaccines, medicines and treatments to tackle Europe's growing health challenges through a concentrated and combined science and innovation effort. It will help secure the future international competitiveness of Europe's pharmaceutical industry.

The new IMI2 JTI runs from 2014 to 2024. It brings together the members of the European Federation of Pharmaceutical Industries and Associations (EFPIA) and is also open to other industries and sectors.

What results and benefits do we expect?

IMI2 takes the collaborative vision and public health focus of IMI to the next level. Its strategic research agenda is based on the new WHO report 'Priority medicines for Europe and the world'. IMI2 will provide Europeans with better medicines and treatments. Cost savings will ease the burden on public healthcare systems and greater co-ordination across industry sectors will result in more reliable and faster clinical trials, and better regulation.

IMI2 research and innovation efforts will also open up further commercial possibilities based on new services and products.

In particular, IMI2 aims to deliver:

- a 30% better success rate in clinical trials of priority medicines identified by the WHO;
- clinical proof of concept in immunological, respiratory, neurological and neurodegenerative diseases in just five years;

Research and Innovation

- diagnostic and treatment bio-markers for four diseases;
- at least two new therapies for antimicrobial resistence or Alzheimer's disease.

How much will it cost?

IMI2 is based on equal sharing of costs between the EU budget and the private sector. The budget of IMI2 is €3.276 billion. The EU will contribute up to €1.638 billion from Horizon 2020, the EU's research and innovation programme. This will match the EFPIA commitment of up to €1.425 billion and an additional amount of up to €213 million if other life science industries decide to contribute to IMI2 as members or associated partners in individual projects.

How will it be run?

JTIs are partnerships between the EU and industry. They establish their own strategic research agenda and fund projects selected through open and competitive calls for project proposals. The new IMI JTI will be managed by a dedicated entity called a Joint Undertaking, whose Governing Board, comprising equal numbers of representatives of the European Commission and industry, will take funding decisions.

What has the current JTI achieved so far?

The 46 ongoing projects funded by the current IMI partnership have already scored a number of remarkable achievements: faster development of diabetes drugs

through the first ever human pancreatic beta cell line; new models to better predict drug toxicity; a new definition of severe asthma which promises to unlock new therapies; the world's largest database of schizophrenia studies to develop more targeted treatments; and a better understanding of the mechanisms of chronic pain.

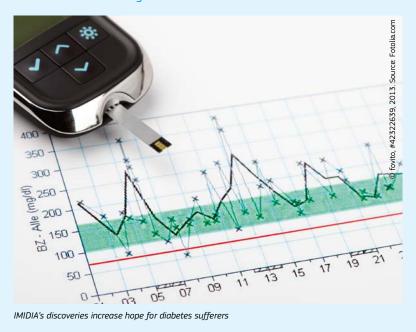
Furthermore, by the end of 2013, IMI projects had resulted in over 600 academic publications, three quarters of which appear in the leading journals for their research field. The average citation impact for IMI project research is twice the world average and almost twice the EU average.

IMI was launched in 2007. The first phase had a budget of €2 billion, and has already brought together over 6000

New tools for diabetes research and treatment

Diabetes is on the increase in the EU and presents a growing burden on Europe's healthcare systems - not to mention the deleterious impact on sufferers. Research conducted under the IMIDIA consortium focuses on the functioning of specialised "beta cells" in the pancreas that produce insulin, the hormone that removes sugar from blood. It is the failure of the body to produce insulin that results in type 1 diabetes. Participants in this project from academic institutions (INSERM, CNRS) as well as from the biotech company Endocells were the first in the world to generate human pancreatic beta cells that can survive in test tubes. This represents an invaluable new tool that can be used to develop new therapies and to further improve disease management in diabetes.

More information: IMIDIA: www.imidia.org



researchers in 650 academic and research teams, 409 industry (EFPIA) teams, 120 SME teams, 25 teams in patient organisation and 17 teams in regulatory bodies.

Useful links

Innovative Medicines Initiative (IMI): www.imi.europa.eu