



European
Commission

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

- Next generation vaccines, medicines and treatments, e.g. new antibiotics;
- Faster roll-out of effective and sustainable healthcare;
- Leveraging public and private research funding to lower investment barriers;
- Supporting the global competitiveness of Europe's pharmaceutical industry.



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What is the challenge?

The huge burden of chronic and degenerative diseases keeps growing as Europe's population is getting older. But the risk and costs of developing new vaccines, medicines and treatments are soaring, as is the complexity of diseases and of 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 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 is expected to start in January 2014 and end in 2024. It will bring together the members of

the European Federation of Pharmaceutical Industries and Associations (EFPIA) and will also be open to other industries and sectors.

What results and benefits do we expect?

IMI2 will provide Europeans, including the increasing numbers of older people, with more efficient and effective 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 new commercial possibilities based on new services and products. The research, industry and societal sectors involved in IMI2 will benefit from the co-operation and knowledge sharing which take place in these projects.

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;
- new and approved diagnostic markers for four of these diseases and at least two new medicines which could

either be new antibiotics or new therapies for Alzheimer's disease.

What will the new total budget be?

IMI2 is based on equal sharing of cost between the EU budget and the private sector. The estimated budget of IMI2 is €3.45 billion. The EU will contribute up to €1.725 billion from Horizon 2020, the next EU research and innovation programme. This will match the in-kind EFPIA commitment of up to €1.5 billion and an additional amount of up to €225 million if other life science industries decide to join and 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 40 on-going 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 January 2013, IMI projects resulted in a total of 320 academic publications in 119 journals, of which 95 are ranked in the top quartile of journals in their specific research fields. The average citation impact for IMI project research is 1.55 for the 2-year period, 2010-2011, where world average is 1.0.

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 focused 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 the so-called type 1 diabetes. Participants in this project from academic institutions (INSERM, CNRS) together with the biotech company Endocells were the first 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

IMI brochure: www.imi.europa.eu/sites/default/files/uploads/documents/IMIBroch2012Web.pdf



IMIDIA's discoveries increase hope for diabetes sufferers

IMI was launched in 2007. The first phase had a maximum budget of €2 billion, and has already brought together around 4500 researchers: 183 research organisations; 387 universities; 363 big companies (EFPIA), 109 SMEs and around 60 other organisations

Useful links

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