

The Innovative Medicines Initiative (IMI)

The Innovative Medicines Initiative (IMI) is working to **improve health by speeding up the development of, and patient access to, the next generation of medicines**, particularly in areas where there is an **unmet medical or social need**. It does this by facilitating **collaboration** between the key players involved in healthcare research, including universities, pharmaceutical companies, other companies active in healthcare research, small and medium-sized enterprises (SMEs), patient organisations, and medicines regulators. This approach has proven **highly successful**, and IMI projects are delivering **exciting results** that are helping to advance the development of urgently-needed new treatments in diverse areas.

Europe's partnership for health

IMI was launched in 2008 as a **public-private partnership** (PPP) between the **European Union**, represented by the European Commission, and the **European pharmaceutical industry**, represented by the European Federation of Pharmaceutical Industries and Associations (EFPIA). The partnership was renewed in 2014 with the creation of the IMI 2 programme.

IMI currently has **over 60 ongoing projects**, with more in the pipeline. Some focus on **specific health issues** such as neurological conditions (Alzheimer's disease, schizophrenia, depression, chronic pain, and autism), infectious diseases (including antimicrobial resistance and Ebola), diabetes, lung disease, oncology, inflammation & infection, tuberculosis, and obesity.

Others focus on **broader challenges in drug development** like drug and vaccine safety, knowledge management, the sustainability of chemical drug production, the use of stem cells for drug discovery, drug behaviour in the body, and the creation of a European platform to discover novel medicines. IMI also supports **education and training** projects.

IMI finances

IMI has a budget of **over €5 billion** for the period 2008-2024, making it the world's largest PPP in health research.

Half of this comes from the **EU's research and innovation programmes**, the Seventh Framework Programme (FP7) and Horizon 2020.

The other half comes from large companies and organisations, mostly **EFPIA companies**. These do not receive any EU funding, but contribute to the projects **'in kind'**, for example by investing their researchers' time or providing access to research facilities or resources.

IMI successes – a snapshot

- the generation of a line of human pancreatic beta cells (the cells which go wrong in **diabetes**) – **a world first**;
- a **simple computer test** that predicts if a potential drug will be harmful to the **heart**;
- the discovery that certain brain changes associated with **autism** may be reversible;
- a **revolutionary ultrasound device** capable of identifying patients at imminent **risk of a heart attack or stroke** (now the subject of a **patent application**);
- a pan-European clinical network to test **novel antibiotics**;
- novel **clinical trial designs** for **schizophrenia** and **Alzheimer's disease** treatments;
- new tools to assess the **benefits and risks of medicines**;
- **courses** to train the next generation of experts in medicines development.

Ambitious goals

IMI works to address the most pressing health needs of patients and society, and on speeding up the development of next generation vaccines, medicines and treatments. IMI is also working on tools to facilitate decision-making on patient access to new treatments. The goals of the IMI 2 programme, which was launched in 2014, are:

- a **30% better success rate in clinical trials** of priority medicines;
- **clinical proof of concept** in immunological, respiratory, neurological and neurodegenerative diseases in five years;
- **new treatments** for diseases where there is a high unmet need;
- new and approved **diagnostic markers**;
- more successful clinical trials of **vaccines**;
- new tools, standards and approaches to **improve the drug development process**.

The focus of IMI's Strategic Research Agenda (SRA) for the period 2014-2024 is on **delivering 'the right prevention and treatment for the right patient at the right time'**. The document maintains a strong focus on the development of new medicines, and also places a heavy emphasis on tools and methods to speed up patient access to new medicines. It was developed on the basis of **extensive consultations** with a wide range of stakeholders and identifies four major axes of research:

- target validation and biomarker research (efficacy and safety);
- adoption of innovative clinical trial paradigms;
- innovative medicines;
- patient-tailored adherence programmes.

The SRA also sets out the health priorities to be addressed by IMI; these are aligned with the 2013 update of the World Health Organisation (WHO) report '**Priority Medicines for Europe and the World**'.

Health priorities in the IMI Strategic Research Agenda 2014

- antimicrobial resistance
- osteoarthritis
- cardiovascular diseases
- diabetes
- neurodegenerative diseases
- psychiatric diseases
- respiratory diseases
- immune-mediated diseases
- ageing-associated diseases
- cancer
- rare/orphan diseases
- vaccines

Get involved!

IMI regularly issues new Calls for proposals, giving researchers from diverse sectors the opportunity to apply to participate in ambitious projects that will pave the way for the development of the medicines of the future.

IMI encourages small and medium-sized enterprises (SMEs), mid-sized companies, patients' organisations, regulatory authorities, academic teams, industry, hospitals and other organisations to **form consortia and apply** to participate in the new IMI projects. Participants in IMI 2 projects benefit from:

- simplified rules (in line with Horizon 2020)
- advantageous funding rates
- broad eligibility for funding
- option for other sectors (e.g. imaging, information technology, diagnostics, animal health) to contribute

Information on new and upcoming Calls for proposals, as well as details of **how to apply**, and guidance on **finding project partners**, can be found on the **IMI website**.

Stay in touch

- Visit the IMI website: www.imi.europa.eu
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