The Innovative Medicines Initiative

Action on COVID-19

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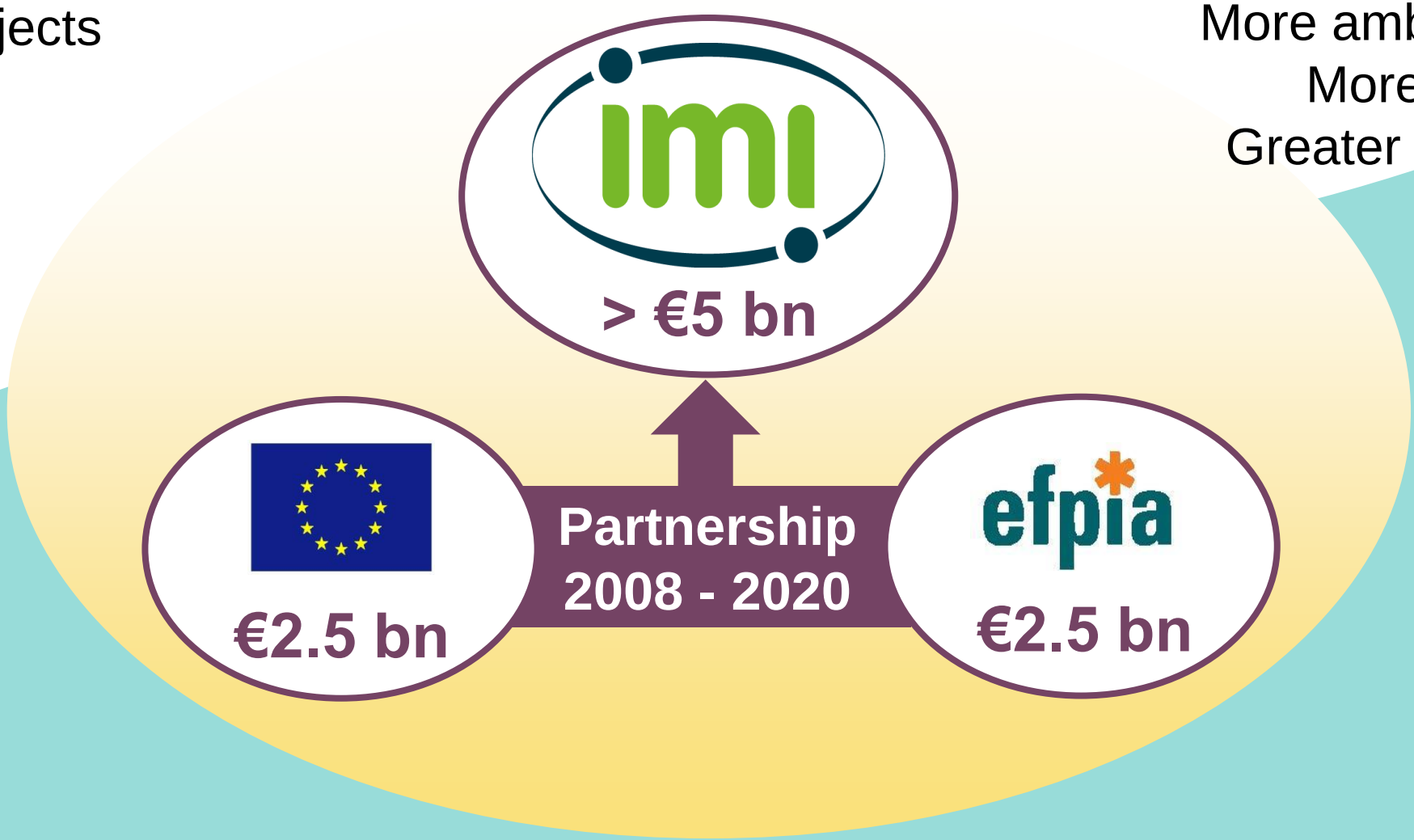
Europe-Japan R&D Webinar on COVID-19
September 17th 2020

IMI1: 2008-2013

€2 bn budget
59 projects

IMI2: 2014-2020

€3.3 bn budget
More ambitious
More open
Greater scope



Using the existing IMI's projects to progress research against COVID-19

Valuable contributions to the global effort to tackle COVID-19 from:

- **ZAPI** – knowledge and tools for a rapid response to a coronavirus outbreak
- **EHDEN** – harmonising clinical data to facilitate reuse and advance research
- **EHDEN, ConcePTION and ADVANCE** - helping the EMA gather real-world data on COVID-19 treatments and vaccines
- **COMBACTE** – access to a clinical trial network specialised in infectious disease studies e.g involved in site selection in 20 European countries in REMAP-CAP Pandemic Strata study
- **ELF/ESCulab** – fast track assessment for COVID proposals
- **HARMONY** – COVID-19 data initiative
- **AETIONOMY & PHAGO** – tools for a new COVID-19 knowledge space
- **c4c** – resources on COVID-19 for children and families
- **eTRIKS** – standards starter pack
- **DO>IT** – informed consent forms for clinical research
- **EUPATI** – reliable resources for patients

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ZAPI: Recent Results on Betacoronavirus

Wang C *et al.* **A human monoclonal antibody blocking SARS-CoV-2 infection.** Nat Commun 2020 May 4;11(1):2251.
doi: 10.1038/s41467-020-16256-y. PMID: 32366817

- Report a human monoclonal antibody that neutralizes SARS-CoV-2 (and SARS-CoV) in cell culture, which targets a communal epitope on these viruses and may offer potential for prevention and treatment of COVID-19.
- ZAPI's platform and recent results feeding in into 2 COVID-19 proposals that have been recently selected for funding:

  1- MANCO (n. 101003651 H2020 Call SC1-PHE-CORONAVIRUS-2020 call). GMP manufacturing of the broadly cross-reacting ZAPI's antibody in high-yield CHO cell-lines for prophylactic and/or therapeutic use and testing into a Phase I clinical trial.

  2- CARE (n. 101005077 H2020-JTI-IMI2-2020-21-single-stage call). Generation of a diverse library of anti-SARS-CoV-2 neutralising antibodies (targeting different Spike epitopes and functions) with proven therapeutic potential and good manufacturability characteristics, via a broad spectrum of antibody generation methods.

COVID-19 Study-a-thon

- On 26-29 March, EHDEN and the OHDSI community organised a 3-day remote COVID-19 study-a-thon involving more than **330 researchers, with 37 healthcare databases from 30 different countries.**

- The aim was to design and execute studies to **inform healthcare decision-making** during the COVID-19 pandemic.

- Initial results include **two high-impact papers:**
  1. The largest ever assessment of the **safety of hydroxy-chloroquine** which had been proposed for COVID-19 https://www.medrxiv.org/content/10.1101/2020.04.08.20054551v1
  2. International **characterisation of COVID-19 patients** https://www.medrxiv.org/content/10.1101/2020.04.22.20074336v1

IMI COVID-19 Call for Proposals

- Launched in an accelerated manner on March 4th 2020 as a singlestage call
- Focus on therapeutics and diagnostics
- Available budget of €72 million from IMI
  - Industry contribution from selected projects: €45 million
- Specifically excluded vaccines (both EC and industry were already funding vaccine R&D through other mechanisms)
- Received over 140 submissions (major evaluation challenge)
- 8 projects selected for funding

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IMI projects on COVID-19 from Call 21

- **CARE: Corona Accelerated R&D in Europe** (started 01/04/2020)

will identify existing drugs that could be effective as treatments for the COVID-19 pandemic, and develop new drugs specially designed to tackle the SARS-CoV-2 virus.

- **Impentri: Development of Impentri, an intravenous imatinib formulation for COVID-19 acute respiratory distress syndrome** (started 01/07/2020)

will test in a randomised, double-blind clinical trial the efficacy and safety of the imatinib as a treatment for COVID-19 patients with lung inflammation.

- **MAD-CoV 2: Modern approaches for developing antivirals against SARS-CoV 2 (**started 1 August 2020)

Will dive into the molecular details of the SARS-CoV-2 virus and use this knowledge to develop new COVID-19 treatments by engineering human tissue to test new antiviral treatments in the laboratory.

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IMI projects on COVID-19 from Call 21

- **DECISION: A miniaturized disposable molecular diagnostics platform for combatting coronavirus infections** (started 01/07/2020)

will develop a low-cost, miniaturised, disposable molecular diagnostic system o test patients with laboratory quality performance pretty much anywhere and give them their results in a matter of minutes.

- **RAPID-COVID: Robust Automation and Point of Care IDentification of COVID** (started 1 August 2020)

will develop a diagnostic test that can simultaneously detect SARS-CoV-2 as well as 30 other common respiratory bacteria and viruses.

- 3 IMI2 COVID-19 projects focusing on diagnostics still in Grant Agreement Phase
  - Due to the nature of the emergency, IMI can reimburse eligible project costs incurred since March 31st
  - So bureaucracy does not slow down research!

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Thank you

https://www.imi.europa.eu/