ERAvsCORONA ACTION PLAN: FIRST RESULTS

Acting fast – acting together

"Three months ago, we were facing a pandemic of unknown proportions. But Europe's scientific talent and innovative capacity gave us hope. Through the ERAvsCorona Action Plan, we jointly mobilised European research and innovation to tackle the crisis, and we did it fast. We joined forces, scaled up our response, and it made us stronger."

Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth

The ERAvsCorona Action Plan, developed jointly by Commission services and national authorities, features **10 short-term research and innovation actions** to tackle the coronavirus.

In just three months of working together, the Action Plan has delivered results. They include closer coordination of actions taken by the Member States and the Commission, joining forces in providing financial support, creating new funding opportunities, refocusing existing projects, sharing data, setting mechanisms to match great ideas with market opportunities and much more.

It shows that **acting fast and acting together** has big impact.

1 Coordination of research and innovation funding against the coronavirus.

Coordination of Member States' efforts and exchanging information covering the whole process from testing through clinical trials to manufacturing and financing is crucial. This work is expected to advance cooperation between the Member States and the Commission by identifying different bottlenecks (ethical, regulatory) in conducting clinical trials, identification of research gaps/priorities in testing path, determining the existing manufacturing capacity while defining associated investment needs as well as looking at possible future financing opportunities.

2 Extending and supporting large EU-wide clinical trials for clinical management of coronavirus patients

In order to have robust evidence of the efficacy and safety of potential COVID-19 treatments and vaccines in the shortest possible time, studies need to enrol a sufficient number of participants and use harmonised protocols. That is why an EU-wide clinical trial network is being developed. It will coordinate planning and implementation of large-scale clinical trials across Europe, producing the evidence to support regulatory decisions and inform public health policymaking.

At this stage, the EU-wide clinical trial network is operational for the investigation of therapeutic approaches through the REMAP-CAP and the DisCoVeRy trials. Both may receive Horizon 2020 funds to support their further rollout in Europe. Hospital research sites from all Member States can participate in these trials, using the same standard protocols and collecting data in a harmonised manner.

When plausible vaccine candidates become available, the EU-wide clinical trial network can also support vaccine trials. Over 120 vaccine candidates are currently in the development pipeline, 10 of which have started clinical evaluation.

3 Second call for an Expression of Interest for innovative and rapid health-related approaches to respond to COVID-19 and to deliver quick results for society for a higher level of preparedness of health systems

New funding to match new needs. The 2nd special call for Expressions of Interests that the Commission launched on 19 May has drawn a **strong response** from the research community, with 454 proposals submitted in just over three weeks. Following the evaluation of these proposals by independent experts, the results are scheduled to be announced by mid-August.

The projects funded under this call should repurpose manufacturing for rapid production of vital medical supplies and equipment needed for testing, treatment and prevention, as well as develop medical technologies and digital tools to improve detection, surveillance and patients care. New research will learn from large groups of patients (cohorts) across Europe and better understanding of the behavioural and socio-economic impacts of the coronavirus epidemic could help improve treatment and prevention strategies.

This call focuses on delivering results quickly. The new solutions need to be available and affordable for all, in line with the principles of the Coronavirus Global Response.

The call follows up on the first special call launched already in January and funded with €48.2 million. Some of the 18 projects funded under the first call are **already delivering results**, and they are clear that this would not have been possible without EU support.

Promising results of EU-funded research

- Researchers involved in the EU-funded **HG nCoV19 test** project developed a new portable diagnostic system to detect viral infection that gives accurate and reliable results in 30 minutes. On 20 May, they announced that they had fulfilled the necessary requirements to put it on the market.

- On 9 June, EU-funded researchers from the University of Copenhagen working on the **Prevent-nCoV** project announced their vaccine against COVID-19 shows promising results. It passed tests in mice and they hope to commence clinical trials before the end of the year.

- The **Exscalate4CoV** project announced on 18 June, that an already registered generic drug used to treat osteoporosis, Raloxifene, could be an effective treatment for COVID-19 positive patients with mild or asymptomatic infection. The project is funded under Horizon 2020 and uses an EU-backed supercomputing platform, one of the world's most powerful, to check the potential impact of known molecules against the genomic structure of coronavirus.

In addition, eight large-scale projects aimed at developing treatments and diagnostics for the coronavirus were selected to be funded with a total of €117 million in a fast-track call for proposals launched by the Innovative Medicines Initiative (IMI), a partnership between the Commission and the pharmaceutical industry.

4 Increasing support to innovative companies

Time is of the essence when it comes to financing innovative solutions. On 8 June, the Commission announced that it has awarded nearly €166 million via the **European Innovation Council (EIC)** Accelerator Pilot to 36 companies with breakthrough ideas to combat the coronavirus pandemic. €150 million of this funding is an additional contribution allocated fully to fight the coronavirus outbreak. In addition, over €148 million will be granted to another 36 companies set to contribute to the recovery plan for Europe, bringing the total investment from Horizon 2020, the EU's research and innovation programme, to €314 million in this round.

These 36 selected companies will work on pioneering projects, such as on expanding the production of bio-decontamination wipes, developing ventilation monitoring systems that provide first aiders with real-time feedback on the quality of the ventilation given to the patient, developing an antibody platform to treat severe cases of infection, and many more.

Moreover, the European Commission reinforced Access to Risk Finance for **InnovFin Infectious Diseases Financial Facility**, funded under Horizon 2020 and implemented by the European Investment Bank (EIB), with €400 million. This will enable the EIB to support more key innovative players developing innovative vaccines candidates, drugs, medical and diagnostic devices or novel critical research and innovation infrastructures (including production facilities).

Investing in highly innovative ideas

- On 11 June, the EIB concluded a €100 million debt financing agreement with BioNTech to support the development of BNT162, the company's COVID-19 vaccine programme. It is one of the broadest globally, with four vaccine candidates being tested in parallel. BioNTech became the first European company to begin clinical testing. The project benefits from the InnovFin instrument run under Horizon 2020, and from the European Fund for Strategic Investments.

- On 23 April, the EIB Board approved a €75 million equity investment into CureVac, a highly innovative European vaccine developer, to scale up development and production of a vaccine against the coronavirus. The deal is expected to be backed by the InnovFin instrument run under Horizon 2020.

5 Creating opportunities for other funding sources to contribute to research and innovation actions on the coronavirus

When demand exceeds available resources, it is crucial to look for other opportunities. **139 companies** that could not receive funding under the EIC Accelerator due to budget limitations have received the newly introduced **COVID-19 Seal of Excellence** in recognition of the value of their proposal and in order to help them attract support from other funding sources.

A meeting with the national and regional funding authorities interested in setting up Seal support schemes already took place in April 2020. They were later provided with the national and regional breakdown of the Seals and the requested amount and with data of the consent Seals. Follow-up will be ensured with those Member States or regions willing to support projects with COVID-19 Seal of Excellence to make sure these excellent and innovative ideas get funded.

Private investors have an opportunity to support the COVID-19 Seal of Excellence by participating in special Access2EIC e-pitching sessions. Five seal projects already presented their project during the first session. Another e-pitching session will be organised in September 2020. In addition, eight companies have been selected under InvestHorizon to benefit from coaching and a boot camp to improve their investment readiness. The Intellectual Property Rights (IPR) Helpdesk offered free IPR services to interested Covid-19 Seals.

The European Investment Project Portal (EIPP) helps COVID 19 Seal of Excellence projects to boost their visibility to a large network of alternative European and international investors. A special 'Covid-19 seal' tag has been developed on the portal, so that investors can identify easily and quickly which projects received the COVID-19 Seal of Excellence.

6 Establish a one-stop shop for Coronavirus R&I funding

Good coordination and quick mobilisation of funds are essential to help our researchers and innovators meet the coronavirus challenges. To this end, the Commission has launched the ERA corona platform, a one-stop shop for information on coronavirus-related research and innovation funding for current and prospective beneficiaries.

7 Establish an ad-hoc High Level R&I Task Force on the Coronavirus

Epidemics of infectious diseases can be unpredictable, and it's necessary to be prepared. The Commission and Member States continue their discussion on future preparedness. In the meantime, in order to make best use of scientific advice in facing the coronavirus, a special advisory panel on COVID-19 (group of epidemiologists and virologists) was set up to provide recommendations to the Commission on response measures, including policy measures for addressing and mitigating medium and long-term consequences of COVID-19.

The Commission also appointed Belgian virologist Peter Piot to the post of special advisor to President Ursula von der Leyen on the response to the coronavirus and COVID-19.

8 Access to Research Infrastructures (RIs)

European **biomedical research infrastructures** were able to rapidly focus work on COVID-19. For example, they developed and distributed widely the current real-time polymerase chain reaction (PCR) diagnostic test for the virus, tackled bottlenecks in vaccine research and more.

Research infrastructures from other scientific domains are also helping to address the various dimensions of the COVID-19 crisis, including its economic and social impacts. To fuel these developments and enhanced access to services, on-going grants have been topped up with almost €11 million.

9 Research data sharing for SARS-CoV-2 and the Coronavirus

Open sharing of data boosts research and discovery. In April, the Commission together with several partners launched the European COVID-19 Data Platform to enable the rapid collection and sharing of available research data. The new platform provides an open, trusted, and scalable European and global environment where researchers can store and share datasets, such as DNA sequences, protein structures, data from pre-clinical research and clinical trials, as well as epidemiological data. It is the result of a joint effort by the European Commission, the European Bioinformatics Institute of the European Molecular Biology Laboratory (EMBL-EBI), the Elixir infrastructure and the EOSC-Life, ELIXIR-Converge, VEO and RECODID H2020 projects, as well as the EU Member States and other partners.

In less than two months, the platform now already includes more than **35.000 raw viral sequence data sets, 200 protein structures and 90.000 scientific publications** that can be freely shared between researchers.

In addition to the COVID-19 Data Platform, preparatory work is ongoing to set up a new, complementary Population Health Information Research Infrastructure, which will facilitate data, information and best practices exchanges between public health actors in the Member States.

10 Pan-EU Hackathon to mobilise European innovators and civil society

Talented minds are helping to find solutions and support the people. A pan-European hackathon, EUvsVirus, was organised from 24-26 April. It was the **largest in the world**, with 21.000 participants and 2160 solutions, out of which 120 were selected as winners. They include **pioneering concepts** such as an AI-powered platform that connects hospitals with suppliers and funds, remote queuing solutions for retailers ensuring social distancing to keep staff and customers safer, an experiential platform that allows parents, teachers and children to connect with peers, an original 'business care' system to help small and medium-sized businesses cover their liquidity needs, and many others.

But solutions need funding. From 21 to 28 May, a Matchathon event took place to **match the needs with available resources** and to boost the scaling up of creative solutions to coronavirus challenges. It brought together the 120 winning solutions from the Hackathon with over 458 partners including investors, corporates, public authorities, academia and research institutions from 40 countries.

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