

# Investment in a robust research and development (R&D) infrastructure



## The importance of R&D

The pharmaceutical industry is the most R&D intensive industrial sector in Europe.<sup>1</sup> R&D lies at the core of our innovative industry, bringing with it hope for patients and the prospect of long-term health system sustainability while contributing to Europe's economic growth.

The public and private sectors play different but complementary roles in R&D. While governments mainly invest in and conduct basic research, it is the pharmaceutical sector that translates this research into innovative breakthroughs, enabled through expertise, experience and significant resources.

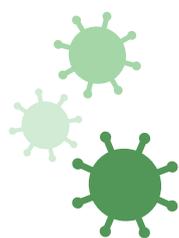
## Industry as a driving force

Scientific breakthroughs are achieved through disruptive, innovative, and cutting-edge science, and industry is a driving force to deliver this. We believe governments should continue to provide routes for public and industry-partnered consortia which reflect the environment required for innovation, rather than solely focusing on academia-led consortia.



Public-private partnerships should play an increasing role in advancing scientific progress and innovation. A collaborative R&D ecosystem that reflects this will speed up the development of innovative breakthroughs to benefit all European citizens.

This approach should be further underpinned by the adoption of new, patient-centric clinical trial approaches supported by cutting-edge digital tools and techniques.<sup>2</sup>



## Post COVID-19 lessons

The challenges of the COVID-19 pandemic have served to illustrate the central contribution that R&D and associated innovation play within the life sciences framework and its capacity to mount a scientific and technology-based response. At the core of this has been unprecedented collaboration, innovation driven by a diverse range of research settings in both the public and private sectors. This collaborative approach (which in some cases has crossed national boundaries) appears to have accelerated scientific breakthroughs.<sup>3</sup>

The clinical trials ecosystem has been heavily impacted by COVID-19, both in terms of enrolment in new trials and maintenance of existing trials. The sector has responded by looking at alternative approaches to patient interactions using telemedicine and remote consultations, leveraging digital technology for remote monitoring and eConsent. The shift in the clinical trials process (including responding to the urgent need for a COVID-19 vaccine) will need to be assessed in order to understand the lessons that can be drawn from this experience moving forward.

<sup>1</sup> [Pharmaceutical Industry in Figures 2020 report by EFPIA](#)

<sup>2</sup> [EFPIA - Supporting the adoption of new clinical trial design supported by digital tools. 29/11/18](#)

<sup>3</sup> [Response and Resilience: Lessons Learned from Global Life Sciences Ecosystems in the COVID-19 Pandemic - Economy report November 2020](#)

## What are the risks of not investing in R&D?

Without coordinated investment across the region, Europe runs the risk of falling behind the rest of the world.<sup>4</sup> Additionally, R&D investment in Europe is not growing fast enough to achieve its stated target of investing 3% of GDP in R&D in 2020.<sup>5</sup>

We believe that Europe can remain a competitive global research and clinical trial hub if we break out of siloed approaches and foster an environment for public-private collaboration to ensure that innovation in health is a priority for investment and public funding.



## What is Pfizer doing in this area?

- 1 We work with innovators to deliver a networked R&D model - our response to the COVID-19 pandemic, including our partnership with BioNTech in the development of a COVID-19 vaccine, illustrates the importance of a cross-sector collaborative approach.
- 2 We have participated in over 40% of projects within the Innovative Medicines Initiative (IMI) so far, working across geographies with co-ordinated investment.
- 3 We are implementing digital solutions and leveraging data and AI to accelerate drug development and deliver breakthrough medicines to patients faster.<sup>6</sup>
- 4 We are investing in remote decentralised clinical trials to ensure continued progress in new treatments.



### POLICY RECOMMENDATIONS

## To support investment in a robust R&D infrastructure

- 1 **Develop Innovation Clusters** which will compensate for Europe's currently fragmented R&D ecosystem and attract highly skilled workers, as well as investment capital, to support biosciences innovation
- 2 **Increase government investment in innovation**, especially foundational basic research and disruptive innovation through digital approaches and technology, to prime Europe's R&D system and accelerate the development of treatments and vaccines.
- 3 **Implement incentives to stimulate investment in public-private partnerships** to promote collaboration between stakeholders supporting the life sciences ecosystem and recognise the value of innovation in Europe.



<sup>4</sup> [Gross domestic spending on R&D 2020](#)

<sup>5</sup> [Eurostat, Europe 2020 indicators - R&D Innovation](#)

<sup>6</sup> [Visit Pfizer website](#)