## Sanofi's Response to COVID-19

SANOFI

At Sanofi, our purpose is to discover breakthrough medicines and vaccines to improve the lives of millions of people around the world. This drive to transform the practice of medicine has taken on increased urgency for everyone in the Sanofi family since the global emergence of COVID-19.

Sanofi is rapidly responding to the evolving challenge of COVID-19. Our responsibility to our employees and their families, patients and caregivers, health care providers, and communities drives us to act on our long history of innovation to bring cutting edge science and dedicated people to face this threat. We would like to take this opportunity to share our approach to this crisis.

## We Are Leveraging Our Expertise in Vaccine Development

Sanofi Pasteur, the vaccines business unit of Sanofi, is developing a COVID-19 vaccine in collaboration with the Biomedical Advanced Research and Development Authority (BARDA). In addition to our work to develop a safe and effective vaccine utilizing proven recombinant technology, our partnership will also leverage an agreement signed last year to establish state of the art facilities in the United States for sustainable production. BARDA and Sanofi Pasteur recently expanded this collaboration to accelerate into non-clinical studies and a Phase 1 clinical trial to evaluate the initial safety of the vaccine candidate. Most recently, Sanofi and GlaxoSmithKline (GSK) announced their collaboration in the fight against COVID-19. The companies signed a letter of intent to develop an adjuvanted vaccine for COVID-19, using innovative technology from both companies, to accelerate our collective opportunity to help address the ongoing pandemic.

Additionally, Sanofi Pasteur and Translate Bio, a clinical-stage messenger RNA (mRNA) therapeutics company, are collaborating to develop a novel mRNA vaccine for COVID-19. This collaboration builds on an existing agreement between the two companies to develop mRNA vaccines for infectious diseases, including COVID-19. We are combining our deep vaccine expertise and support with Translate Bio's mRNA platform to discover, design, and manufacture a number of SARS-CoV-2 vaccine candidates.

We believe pursuing multiple vaccines with different technologies, while preparing to manufacture at scale, gives Sanofi and our partners the best opportunity for success against COVID-19.

## We Are Researching Existing Products as Potential Treatments for COVID-19

Sanofi is committed to making every effort to help countries across the world, including the U.S., combat the coronavirus outbreak. In March we announced the initiation of our global clinical trial program with our collaborator Regeneron Pharmaceuticals evaluating Kevzara® (sarilumab) in patients hospitalized with severe COVID-19. Kevzara is a fully-human monoclonal antibody that inhibits the interleukin-6 (IL-6) pathway by binding and blocking the IL-6 receptor. Initial results from the Phase 2 U.S. trial were recently released and the Phase 3 global trial is ongoing. The use of Kevzara to treat the symptoms of COVID-19 is investigational and has not been fully evaluated by any regulatory authority.

Additionally, there have been increased questions around the use of hydroxychloroquine in the management of COVID-19 based on preliminary results from independent studies in different countries. Sanofi divested this medicine in the U.S. in 2013 but is one of the main manufacturers globally.

To date there is insufficient clinical evidence to draw any conclusion over the clinical efficacy or safety of hydroxychloroquine (or chloroquine) in the management of COVID-19. Any use of this medicine in the management of COVID-19 is considered an off-label use (i.e. in absence of a marketing authorization for the indication of COVID-19). The World Health Organization (WHO) announced an international clinical trial to investigate the use of several medicines, including hydroxychloroquine, in the management of COVID-19. At Sanofi, we are doing our part to contribute. We have committed to donate 100 million doses of hydroxychloroquine to 50 countries around the world. We have initiated two clinical studies on hydroxychloroquine and are providing the medicine for free to investigator sites participating in the WHO trial as well as to other independent research centers.

## We Are Exploring Digital Solutions

Further adding to our ongoing efforts to fight the COVID-19 pandemic on multiple fronts, we have signed an agreement with Luminostics to evaluate a collaboration on a unique self-testing solution for COVID-19. Luminostics would contribute its proprietary technology for consumer-diagnostics for COVID-19 testing while Sanofi would bring its clinical research testing experience and capabilities. The goal is to provide a smartphone-based solution that eliminates the current need for healthcare professional administration or laboratory tests. Based on Luminostics' existing technology and protypes, both companies envision to start development activities in the coming weeks.

Sanofi is continually assessing the global health implications of the COVID-19 virus – and our role in addressing this challenge – and we remain committed to working closely with global health organizations and governments to minimize the risk and impact of COVID-19.

