ExpreS²ion to lead European COVID-19 vaccine consortium for rapid clinical development

Hørsholm, Denmark, February 24, 2020 – Today, ExpreS²ion Biotechnologies ApS ("ExpreS²ion"), a fully owned subsidiary of ExpreS²ion Biotech Holding AB, announces that the company will lead a consortium of European expert entities in applying for the EU Horizon 2020 and the Coalition for Epidemic Preparedness Innovations (CEPI) grant calls for COVID-19 (SARS-CoV-2) Coronavirus vaccine development. The consortium includes all the bench-to-bedside expertise required for rapid clinical development of the COVID-19 vaccine that is already under development by ExpreS²ion.

The aim of the consortium is to develop a COVID-19 vaccine candidate, including performing proof-of-concept non-human primate (NHP) challenge studies, as well as a Phase I/IIa clinical trial. The ambitious aim is to initiate clinical investigations within 12 months.

The consortium members are world-leading experts in their respective fields, covering all relevant areas of viral research and vaccine development required for rapid clinical development of a COVID-19 vaccine. This includes pre-clinical and clinically validated experience from working with similar Coronaviruses such as MERS and SARS, ExpreS²ion’s Drosophila S2 insect cell expression system, AdaptVac’s Virus-Like Particle technology and international large-scale production capacity provided by AGC Biologics, with production sites in Denmark, Germany, the US and Japan.

ExpreS²ion’s CEO Bent Frandsen comments:
“Our rapid response to this global emergency stems from ExpreS²ion’s established network of viral research and clinical vaccine experts, with our ExpreS² protein production platform and our joint venture AdaptVac’s Virus-Like Particle technology as core enabling technologies of this project. This combination of partners will ensure prompt development and optimal vaccine efficacy, as we embark on creating a unique COVID-19 vaccine, with a very ambitious timeline of initiating clinical investigations within 12 months.”

In addition to ExpreS²ion, the consortium members are AdaptVac, AGC Biologics, Biomedical Primate Research Centre (BPRC), Institute for Tropical Medicine (ITM) at University of Tübingen, Leiden University Medical Center, University of Copenhagen and Wageningen University.

About AdaptVac
AdaptVac is a joint venture between ExpreS2ion Biotechnologies and NextGen Vaccines, owned by the inventors of the novel proprietary and ground-breaking capsid-like virus particle (cVLP) platform technology spun out from the University of Copenhagen. The Company aims to accelerate the development of highly efficient therapeutic and prophylactic vaccines within high value segments of oncology, infectious diseases and immunological disorders. Granting of the core patent in the US has expanded AdaptVac’s patent protection to include our entire pipeline of vaccines and immunotherapies in development. Please visit: www.AdaptVac.com

About AGC Biologics
AGC Biologics (www.agcbio.com) is a leading global Contract Development and Manufacturing Organization (CDMO), with a strong commitment to deliver the highest standard of service to our clients and partners. The company currently employs more than 850 employees worldwide. AGC Biologics’ extensive network spans three continents, with cGMP-compliant facilities in Seattle, Washington; Copenhagen, Denmark; Heidelberg, Germany; and Chiba, Japan.

About Biomedical Primate Research Centre (BPRC)
BPRC (www.eatris.eu/institutes/bprc) is one of the largest European primate research centers for vital research that contributes to the identification and development of new medicines for chronic or deadly disorders. BPRC is committed to using non-human primates for this critical research where there are no suitable alternatives. In order to halt the COVID-19 epidemic, new antiviral drugs and vaccines are urgently needed. Therefore, BPRC is setting up a non-human primate challenge model with the SARS-CoV2 virus, to facilitate testing of COVID-19 antivirals and vaccines.
About Leiden University Medical Center (LUMC)
The virology lab at LUMC (www.lumc.nl) has been working on SARS-CoV and MERS-CoV since these emerged in the human population, and they do a combination of basic and more translational research on these viruses. They focus on thoroughly understanding these viruses and their interactions with host cells, and use this knowledge to develop innovative antiviral strategies, including vaccines and antivirals. Analyses of infections in both cell culture as well as mouse models are possible in their BSL-3 facilities, including testing the efficacy of vaccines and antivirals. This expertise and experience will be instrumental for the consortium.

About Institute for Tropical Medicine (ITM) at University of Tübingen
The Eberhard Karls Universität Tübingen (EKUT) is one of Europe’s oldest universities, with key strengths in the Sciences and the Life Sciences. Within the Faculty of Medicine, the Institut für Tropenmedizin, Reisemedizin und Humangarantisitologie (ITM) is an established Centre of Excellence. The institute is also part of the Comprehensive Infectious Disease Center at the University Hospital Tübingen and a site of the German Center for Infection Research (DZIF).

ITM-EKUT is a leading institution performing clinical trials in infectious diseases, especially antimalarial, interventions and vaccines both at its dedicated Clinical Trials Platform (CTP) and in collaboration with partner sites in tropical countries. This platform has been developed to conduct Phase I-IV clinical trials according to ICH-GCP standards, and a number of successful trials have been completed since its foundation. Qualified study physicians, clinical investigators, project managers, study nurses, pharmacists, technicians, and other study staff are experienced members of the CTP team. In addition, the institute has acted as sponsor for several trials for Ebola vaccine (rVSV-ZEBOV), malaria treatment (parenteral artesunate) and vaccine (VAR2CSA/PAMVAC). Large international projects and multicentre clinical studies are coordinated within the field of poverty related and neglected tropical diseases. In addition to strongly patient-oriented research on chemotherapy and vaccination studies, model systems are also used. Models for malaria, filariasis, schistosomiasis and echinococcosis are uniquely established in Germany.

About University of Copenhagen
The University of Copenhagen was founded in 1479 by the Danish king Christian 1, and today has approx. 38,000 students and 9,000 employees – of whom some 5,000 are researchers – and revenues of DKK 8.9 billion. Nine Nobel Prizes have been awarded to researchers at the University. The Department of Immunology and Microbiology (ISIM) is part of the Faculty of Health and Medical Sciences at the University of Copenhagen and is physically located in the Panum Building and at the Maersk Tower.

About Wageningen University
The mission of Wageningen University is to explore the potential of nature to improve the quality of life. The Department of Virology studies arboviruses, insect viruses and plant viruses, with special interest in virus-host and virus-vector interactions. The group has a strong international profile in fundamental virology and biotechnological applications to produce recombinant biologicals including vaccines and gene therapy vectors. The baculovirus-insect cell expression system is their preferred platform to produce complex (glyco)proteins, including a highly effective experimental chikungunya vaccine based on virus-like particles. The Laboratory of Virology will now use its expertise to produce immunogenic SARS-CoV2 glycoproteins.

About the COVID-19 Coronavirus outbreak
A novel Coronavirus (COVID-19) outbreak was reported in Wuhan, China in late December 2019. The COVID-19 Coronavirus is a part of the same family as SARS and MERS, and there have been more than 76 000 confirmed cases and over 2 200 deaths reported as of February 21st, 2020. The latest situation updates are available on the WHO web page: https://www.who.int/emergencies/diseases/novel-coronavirus-2019 .

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About ExpreS²ion
ExpreS²ion Biotechnologies ApS is a fully owned Danish subsidiary of ExpreS²ion Biotech Holding AB with company register number 559033-3729. ExpreS²ion has developed a unique technology platform, ExpreS², for fast and efficient non-clinical development and production of complex proteins for new vaccines and diagnostics. ExpreS² is regulatorily validated for clinical supply. The platform includes functionally modified glycosylation variants for enhanced immunogenicity and pharmacokinetics. Since 2010, the Company has produced more than 300 proteins and 40 virus-like particles (VLPs) in collaboration with leading research institutions and companies. Since 2017, ExpreS²ion develops novel VLP based vaccines through its joint venture AdaptVac ApS. For additional information, please visit www.expres2ionbio.com and www.adaptvac.com.