

Strong preclinical immunization data for the ABNCoV2 cVLP-based COVID-19 vaccine published in *Nature Communications*

Today, ExpreS²ion Biotech Holding AB and its affiliate ExpreS²ion Biotechnologies ApS ("ExpreS²ion") announces the publication of strong virus neutralization properties in animal proof-of-concept data for ABNCoV2, a unique capsid virus like particle (cVLP) based COVID-19 vaccine coated with ExpreS²-made SARS-CoV-2 antigens, in the esteemed scientific journal *Nature Communications*. The ABNCoV2 COVID-19 vaccine is the result of a strong collaboration effort by ExpreS²ion and its joint venture partner AdaptVac ApS ("AdaptVac") together with the PREVENT-nCoV consortium, with an exclusive global license granted to Bavarian Nordic A/S.

The published article in *Nature Communications* is a peer-reviewed scientific documentation of the excellent COVID-19 immunization demonstration, with very high level of SARS-CoV-2 virus neutralization shown in a mice model, that was announced in June 2020.

The article is titled "Capsid-like particles decorated with the SARS-CoV-2 receptor-binding domain elicit strong virus neutralization activity". *Nature Communications* is an online journal with papers that are citable via a digital object identifier (DOI) number. The DOI for this paper is 10.1038/s41467-020-20251-8. The paper will be available online at <http://www.nature.com/ncomms>.

CEO Bent Frandsen comments:

"This peer-reviewed publication in *Nature Communications* adds further credibility to the robustness of the excellent COVID-19 immunization data of the ABNCoV2 vaccine that was announced in June 2020. The generation of such strong data for a novel vaccine concept, while working under severe time constraints, would not have been possible without the outstanding team effort of the PREVENT-nCoV consortium. For ExpreS²ion, it is also great to have our unique ExpreS² protein production system cited in yet another *Nature* publication. Furthermore, it is also very encouraging that our joint venture partner AdaptVac's unique cVLP system has been able to achieve such a high level of well-documented preclinical efficacy".

About the cVLP COVID-19 vaccine product

ExpreS²ion and its joint venture partner AdaptVac are engaged in the development of a unique capsid virus-like particle (VLP) COVID-19 vaccine, partly sponsored through a [Horizon 2020 EU grant award](#) to the PREVENT-nCoV consortium to rapidly advance the vaccine candidate against COVID-19 into the clinic. This vaccine technology has the potential to mimic a virus to the body's immune system, giving the optimal stimulus to generate a fast, long-lasting immune response that offers a highly-efficacious protection. Importantly, the production of the vaccine technology can be readily scaled to commercial quantities and ExpreS²ion and AdaptVac are working with [AGC Biologics for the manufacture and scale-up of the vaccine](#). [Bavarian Nordic has licensed the commercialization rights](#) to the cVLP COVID-19 vaccine and variants hereof.

About the PREVENT-nCoV consortium

The consortium is funded by an EU Horizon 2020 grant to develop a COVID-19 vaccine. Further the vaccine development at University of Copenhagen is supported by the Carlsberg Foundation, the research councils and Gudbjørg og Ejnar Honorés Fond. 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, and AdaptVac's capsid virus-

like particle (cVLP) technology. In addition to [ExpreS²ion](#) and [AdaptVac](#), the consortium members are Leiden University Medical Center ([LUMC](#)), Institute for Tropical Medicine ([ITM](#)) at University of Tübingen, The Department of Immunology and Microbiology ([ISIM](#)) at University of Copenhagen, and the Laboratory of Virology at [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 virus-like particle (cVLP) platform technology spun out from the University of Copenhagen. AdaptVac 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 U.S. has expanded AdaptVac's patent protection to include the full pipeline of vaccines and immunotherapies in development.

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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 capsid VLP based vaccines through its joint venture AdaptVac ApS. For additional information, please visit www.expres2ionbio.com and www.adaptvac.com.