
Expres²ion's platform (Expres²) featured in *npj Vaccines* article on malaria vaccine candidate production

Expres²ion Biotech Holding AB and its affiliate Expres²ion Biotechnologies ApS ("Expres²ion") announce that a scientific article on the production of a malaria vaccine candidate using the Company's Expres² platform was published today in the journal *npj Vaccines*, a part of Nature Partner Journals Series. The article "*Production, quality control, stability, and potency of cGMP-produced Plasmodium falciparum RH5.1 protein vaccine expressed in Drosophila S2 cells*", adds further documentation to the successful use of Expres² as a GMP certified production platform for a product that are currently in a Phase 1/2a clinical trial.

The article describes the production of the University of Oxford's leading blood-stage malaria vaccine candidate RH5.1 in accordance with GMP using the Expres² platform. The product met all criteria for sterility, purity and identity and the vaccine formulation was judged suitable for use in humans. RH5.1 is currently evaluated in a phase 1/2a clinical trial.

"This publication adds to the evidence that our Expres² system is an excellent platform for vaccine development and GMP production for clinical trials. We are excited to work with the University of Oxford and their promising RH5.1 malaria vaccine candidate and will of course inform the market when results from this study becomes public", says Expres²ion's CEO Dr. Steen Klysner.

Summary of the *npj Vaccines* article

A leading malaria blood-stage vaccine candidate (PfRH5) called "RH5.1" was produced as a soluble product under GMP using the Expres² platform. The QC testing showed that the master cell bank and the RH5.1 product met all specified acceptance criteria including those for sterility, purity and identity. The vaccine formulation was judged suitable for use in humans and is currently in a Phase 1/2a clinical trial. The data support the future use of the Expres² platform for GMP-compliant biomanufacturing of other novel vaccines.

The article can be accessed via the following link:

<https://doi.org/10.1038/s41541-018-0071-7>

Malaria

Malaria is a major global health problem with 3.2 billion people living at risk of malaria infection. In 2015, malaria was thought to have caused 429,000 deaths, most of which (70%) occurred in children under five years old (WHO, 2016, <http://www.who.int/malaria/media/world-malaria-report-2016/en/>).

In a malaria market assessment study by the Boston Consulting Group sponsored by the Malaria Vaccine Initiative, the malaria vaccine demand was estimated to be translated into a global market value of up to \$400M per year.

Certified Adviser

Sedermera Fondkommission is appointed as Certified Adviser for Expres²ion.

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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. The subsidiary has developed a unique proprietary platform technology, ExpreS², that can be used for fast and efficient preclinical and clinical development as well as robust production of complex proteins for new vaccines and diagnostics. Since the Company was founded in 2010, it has produced more than 250 proteins and 35 virus-like particles (VLPs) in collaboration with leading research institutions and companies, demonstrating superior efficiency and success rates. In addition, ExpreS²ion develops novel VLP based vaccines through the joint venture AdaptVac ApS which was founded in 2017.