

Virometix Announces Publication of Key Non-Clinical Proof-of-Concept Data in Two High Quality Peer-Reviewed Journals

Schlieren, Switzerland, 14 July 2021

Virometix, a privately held Swiss biotechnology company developing a new generation of vaccines and immunotherapeutic drugs for the prevention and treatment of infectious diseases and cancer conditions, today announces publication of key non-clinical proof-of-concept data on its lead vaccine candidate V-306 in two high quality peer-reviewed journals. The data confirm the potential of V-306 for prophylaxis against Respiratory Syncytial Virus (RSV) infection, possibly using a convenient needle-free method of vaccination. Despite the substantial health and economic burden caused by RSV-associated illness, no vaccine is available.

[The first of two manuscripts](#) has been published in "NPJ Vaccines" and provides data demonstrating that the company's structure-guided antigen design and synthetic nanoparticle delivery platform has been used to generate a candidate vaccine (V-306) for prophylaxis against RSV infection. Administration of V-306 generates high titers of palivizumab-like, epitope-specific neutralizing antibodies conferring protection from RSV infection in preclinical animal models. The results suggest that the development of a safe and effective synthetic epitope-specific RSV vaccine may be feasible and have supported the currently ongoing Phase 1 study with V-306 in healthy female volunteers of reproductive age.

[The second manuscript](#) has been published in "Vaccine" and provides important data validating the potential of V-306 to be administered 'epicutaneously' via skin patch delivery, as a method to boost protective immunity to RSV following initial intramuscular injection. Following administration of V-306, the immune response is characterized by a significant increase in specific antibodies capable of competing with palivizumab for its target antigen and neutralizing RSV. Booster immunization with V-306 significantly decreases lung viral replication in mice after intranasal RSV challenge without inducing enhanced RSV disease. This needle-free method of vaccination could be developed for vulnerable populations such as young infants via pregnant women, and the elderly.

Importantly, the inventions in these two publications are accompanied by patent protection and product-relevant patent filings.

Anna Sumeray, CEO of Virometix, commented: "We are gratified to see publication of these data in high quality journals. The body of work detailed in these manuscripts represents several years of careful and thoughtful vaccine discovery based on the use of synthetic chemistry to mimic epitopes predicted to be important in the induction of protective humoral immunity, combined with nanoparticle-based antigen delivery and presentation. We now await the result of our Phase 1 study in healthy subjects, which has been designed to evaluate the safety and immunogenicity of our lead vaccine candidate, V-306."

An epitope-specific chemically defined nanoparticle vaccine for respiratory syncytial virus:

<https://www.nature.com/articles/s41541-021-00347-y>

Epicutaneous immunization using synthetic virus-like particles efficiently boosts protective immunity to respiratory syncytial virus: <https://www.sciencedirect.com/science/article/pii/S0264410X21003972>

For further inquiries, please contact:

Anna Sumeray CEO Virometix AG

Email: info@virometix.com

About Virometix

Virometix AG is a privately held Swiss biotechnology company developing a new generation of vaccines and immunotherapeutic drugs for the prevention and treatment of infections and cancer. In an increasingly global world, there is a considerable medical need for vaccines to combat infectious as well as a number of chronic human diseases, including cancer. Rational molecular design, chemical synthesis and Virometix' proprietary "Synthetic Virus-Like Particle" platform technology allow for the rapid production and optimization of vaccine candidates with the potential to demonstrate superior properties in terms of safety, efficacy and stability.

For more information about Virometix AG please visit: <https://www.virometix.com>