

10.11.2020 - 09:00 Uhr

Swiss Rockets AG announces the founding of ROCKETVAX for the development of a next-generation SARS-CoV-2 vaccine



Basel (ots) -

The rapid development of an effective and safe vaccine against SARS-CoV-2 is a top priority for Swiss Rockets AG. A Basel-based subsidiary, RocketVax AG, was founded to utilize innovative Swiss technologies and expertise to achieve this goal.

"The development of a SARS-CoV-2 vaccine might be more complex than anticipated, and the first generation of vaccines may not provide the long-lasting, high-level protection that will be needed to end the many negative consequences of the global SARS-CoV-2 pandemic. A number of leading SARS-CoV-2 vaccine candidates use other viruses, such as adenoviruses tagged with just one coronavirus protein, particularly the spike protein which is required for the virus to enter cells. However, it is unlikely that these vaccines will induce strong and lasting protection against SARS-CoV-2. We believe that it is important to develop vaccines that cover as many SARS-CoV-2 proteins as possible but without any pathogenic potential", says Dr. Vladimir Cmiljanovic, Chairman and CEO of Swiss Rockets.

Prof. Dr. Thomas Klimkait, Virologist at the University of Basel and Project Leader of Preclinical Development at RocketVax, explains: "As an innovative next-generation vaccine, RocketVax is developing a complete but 'replication blocked' SARS-CoV-2 virus that presents all essential protein components in the virus particle to the human immune system." Novel methods are being utilized in the production of the active ingredient. RocketVax, in a first step, relies on ground-breaking DNA synthesis technology from the ETH spin-off Gigabases Switzerland AG. The gene sequence of the desired artificial viral genome, optimal for an immune response, is designed using high computing power and advanced DNA design algorithms. The designed genome lacks one essential virus element needed for replication. This element is provided by a human producer cell, yielding complete virus particles in the laboratory. The "artificial virus" can be made in large quantities for use as a vaccine. This technology allows the rapid production of various genome sequences, enabling vaccine production with one or mixtures of viral sequences. It also allows for incorporation of any relevant SARS-CoV-2 mutations that may arise in the future.

Foundation of RocketVax AG and acquisition of the inventor rights from the ETH spin-off Gigabases Switzerland AG

Swiss Rockets has acquired the exclusive rights to develop a SARS-CoV-2 vaccine using the breakthrough DNA synthesis technology from the ETH spin-off Gigabases Switzerland AG. The next generation of SARS-CoV-2 virus vaccines will be developed together with Gigabases and a consortium of experts from several leading Swiss universities and institutes.

For this purpose, Swiss Rockets has founded RocketVax AG in Basel and provides the necessary infrastructure with office and laboratory space as an incubator in cooperation with the Canton of Basel-City and the University of Basel. This provides RocketVax with access to the necessary biosafety laboratory. Swiss Rockets also acts as an accelerator by investing additional funds in the development of RocketVax in the medium term and is responsible for supporting RocketVax in national and international financing rounds. Also, management expertise is provided by Swiss Rockets, together with leading Swiss and international experts.

RocketVax works together with leading scientists

Prof. Marcel Tanner, Emeritus Professor of Epidemiology, Medical Parasitology and Public Health and former Director of the Swiss Tropical and Public Health Institute, will act as a chief scientific advisor. He is a leading clinical epidemiologist and a pioneer in R&D for vaccines and drugs against diseases of poverty and neglected tropical diseases.

Prof. Claudia Daubenberg, Head of Clinical Immunology at the Swiss Tropical and Public Health Institute, will support the clinical development. RocketVax will have access to an international clinical trial network to enable innovative and rapid clinical development in different human populations.

Prof. Thomas Klimkait, the virologist at the University of Basel, optimizes the virus production process and leads preclinical development.

Prof. Adrian Egli, Head of Molecular Verification and Sequencing at the University Hospital Basel, will support the preclinical and clinical development.

Dr. Matthias Christen, CEO of Gigabases Switzerland AG, a biotech company responsible for manufacturing and delivering entire DNA constructs essential for different vaccine candidates.

Prof. Beat Christen, Co-Founder of Gigabases Switzerland AG and Professor at the ETH Zurich, advises the company on DNA sequences design.

Prof. Bernd Giese from the University of Fribourg, one of the World's leading chemists, will provide DNA chemistry expertise.

Prof. Christian Münz, Co-head of the Institute for Experimental Immunology at the University of Zurich, provides expertise in new in vivo SARS-CoV-2 infection models.

Team

Board of Directors:

Dr. Jeanette Wood - Chairman, Non-executive Board member

Dr. Vladimir Cmiljanovic - Vice Chairman, Executive Board member

Dr. Natasa Cmiljanovic - Executive Board member

Dr. Thomas Ladner - Non-executive Board member

Marco Illy - Non-executive Board member

Management Team:

Dr. Vladimir Cmiljanovic - Chief Executive Officer

Dr. Natasa Cmiljanovic - Chief Operating Officer

Dr. Mohammad Johri - Chief Business Officer

Dr. Josef Künzle - Chief Quality Officer

About Swiss Rockets AG

Swiss Rockets AG, founded in 2018, is driving a paradigm shift in healthcare and innovation. Patients will benefit from new therapies developed with innovative and disruptive methods. The Swiss Rockets team combines the necessary expertise and experience to produce innovative medicines focusing on cancer and viral diseases.

The founder and CEO of Swiss Rockets AG is Dr. Vladimir Cmiljanovic, a medicinal chemist and entrepreneur with more than 15 years of experience developing cancer drugs. He is the founder of the Swiss biotech companies PIQUR and TargImmune. Together with his sister Dr. Natasa Cmiljanovic, co-founder and Scientific Director of Swiss Rockets AG, he developed cancer drugs at the University of Basel and founded and managed several biotech companies. Other co-founders are Manuel Ebner and Dr. Thomas Sander. Manuel Ebner, Managing Director at Bank of America Merrill Lynch Switzerland, is a strategic advisor to Swiss Rockets. Dr. Thomas Sander, one of the first employees of the biotech company Actelion, is a scientific advisor to Swiss Rockets.

Dr. Vladimir Cmiljanovic heads the Board of Directors of Swiss Rockets AG. Other board members are Prof. Dr. Michael N. Hall, a renowned researcher and professor at the Biozentrum of the University of Basel; Dr. Natasa Cmiljanovic, a medicinal chemist and clinical scientist with experience in the development of cancer drugs; Dr. Thomas Ladner, business lawyer, founder and co-founder of several successful start-ups and the World.Minds Foundation; and André Debrunner, financial expert and fund administrator at Northern Trust Switzerland AG.

For further information and to arrange interviews, please contact:

KCCC Korfmann Corporate Communications Consulting AG
Dr. Sabina Korfmann-Bodenmann
Managing Director

Zeltweg 40
8032 Zurich
T. +41 43 244 87 37
E. s.korfmann@kccc.ch

Swiss Rockets AG
Dr. Vladimir Cmiljanovic
Chief Executive Officer
Rittergasse 3
4051 Basel
T. +41 61 561 54 21
E. vladimir.cmiljanovic@swissrockets.com
www.swissrockets.com

Medieninhalte



The Swiss Rockets' mission is to deliver outstanding results for patients, investors, and inventors. / More information via ots and www.presseportal.ch/de/nr/100080366?langid=2 / Editorial use of this picture is free of charge. Please quote the source: "obs/Swiss Rockets AG"

Original content of: Swiss Rockets AG, transmitted by news aktuell

Diese Meldung kann unter <https://www.presseportal.de/en/pm/150050/4758101> abgerufen werden.