

Sartorius supports development of first vaccine candidate for COVID 19

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CanSinoBIO and the Institute of Bioengineering used Sartorius' BIOSTAT® STR single-use bioreactor system



Sartorius, a leading international partner of life science research and the biopharmaceutical industry, has supported CanSino Biologics Inc. ("CanSinoBIO") and Maj. Gen. Chen Wei's team at the Institute of Bioengineering at the Academy of Military Medical Sciences ("Institute of Bioengineering") in China in their development of the first vaccine candidate against the novel coronavirus SARS-CoV-2 to enter clinical trials. CanSinoBIO and the Institute of Bioengineering used Sartorius' BIOSTAT® STR single-use bioreactor system for the upstream preparation of the recombinant vaccine, thus ensuring the rapid linear amplification of the adenovirus vector (Ad5-nCoV) and ultimately saving time during development.

The BIOSTAT® STR single-use bioreactor system comes with updated BioPAT® toolbox for process monitoring, as well as Flexsafe® STR integrated, single-use bioprocess bags. It has been proven to be used for vaccine manufacturing because it offers rapid scalability and flexibility to adapt to fluctuating demand. The single use bags prevent cross-contamination, and reduce the time needed for washing and sanitation typical in stainless steel bioreactors. As such, the amount of time needed to prepare a vector for a vaccine is shortened from several months to (several) weeks.

"We are pleased that we can help our clients and partners accelerate vaccine development while maintaining compliance with safety protocols, thereby allowing us to contribute to better health for more people," said Huang Xian, Head of Marketing at Sartorius BPS China. "The Sartorius team is making every effort to quickly allocate the staff and equipment needed to support the early stages of vaccine development during this high-risk period. We hope that Ad5-nCoV will achieve approval as early as possible, so it can help stop the spread of the novel coronavirus worldwide."

This is the second collaboration from Sartorius, CanSinoBIO, and the Institute of Bioengineering to accelerate vaccine development. In October 2017, Sartorius' BIOSTAT® STR50 bioreactor system was used during CanSinoBIO's and the Institute of Bioengineering's joint development of a recombinant vaccine against Ebola virus disease. This was the first registered Ebola vaccine in the world.