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ASIA EDITION

Codagenix & Serum Institute to co-develop vaccine against Novel Coronavirus

February 14, 2020 | News

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Codagenix, Inc., a clinical-stage biotechnology company developing prophylactic vaccines and oncolytic virus therapies has announced a collaboration with the Serum Institute of India to rapidly co-develop a live-attenuated vaccine against the emergent coronavirus.

There are no licensed vaccines or therapeutics for this novel coronavirus, now referred to as COVID-19. A live-attenuated vaccine has multiple advantages, including mounting an immune response to multiple antigens of the virus and the ability to scale for mass production.

Codagenix uses viral deoptimization to synthesize "rationally designed," live-attenuated vaccines. Company's technology allows for the rapid generation of multiple vaccine candidates against emerging viruses, starting with only the digital sequence of the viral genome.

Thanks to major advances in the speed and quality of genome sequencing in recent years, in addition to open-source data sharing among scientists and public health agencies around the world, the nCoV genome was available to the public in a matter of days after the virus was first isolated.

Thanks to the availability of this data, Codagenix has already designed multiple nCoV vaccine candidate genomes using its proprietary deoptimization technology. The vaccine viruses will then be grown and tested in vivo by contracted laboratories suitable for containment, prior to testing in clinical trials.

The Serum Institute of India, a vaccine manufacturer and distributor with a global footprint, will then scale-up the manufacture of the vaccine to ensure its availability to meet a critical public health need.

Codagenix and Serum Institute are pursuing an accelerated development pathway with built-in redundancies to increase speed and likelihood of success.

Dr. Adar Poonwalla, the CEO of Serum Institute, commented, "We are very excited for this new partnership with Codagenix and we hope that we can establish a platform dealing with new infectious diseases and outbreaks beginning with the coronavirus epidemic."

Robert Coleman, CEO of Codagenix said, "We are honored to form a collaboration with the Serum Institute, one of the world's leading vaccine manufacturers. With the Serum Institute's financial and technical support, we will be able to push a coronavirus vaccine into the clinic on an extremely rapid timeline. Live-attenuated vaccines like the ones developed by Codagenix are ideally suited to outbreak scenarios as they scale rapidly and generally require only modest amounts of active ingredient for each immunization, as compared to inactivated and subunit vaccines. We are proud to be confronting this public health crisis head-on."

Glenn Rockman, of Adjuvant Capital, added: "One of the many compelling features of the Codagenix technology is the theoretical ability to rapidly respond to emerging viral threats. We never imagined the Codagenix platform would be tested by a possible pandemic so soon after we invested, but we are nonetheless grateful for the opportunity to contribute to the global nCoV response. The Codagenix team has been working around the clock with our new colleagues at the Serum Institute of India, and both companies are eager to manufacture and test these new vaccine candidates as quickly as possible."

The newly identified coronavirus causes mild to severe respiratory illness, with symptoms including cough and fever. Until an effective vaccine becomes available, transmission of the virus can be prevented by frequent handwashing and avoiding close contact with people who are sick.