Canada’s AbCellera Biologics Inc. to develop mAbs for 2019-nCoV outbreak

According to a statement of CEO, AbCellera Biologics Inc., Vancouver, Carl Hansen to BioCentury news, the company has started developing monoclonal antibodies (mAb) for treatment Novel Coronavirus (2019-nCoV) infections.

The first patient who contacted 2019-nCoV infection was identified from Wuhan, China. Since then virus has shown evidences of human-to-human transmission and the rate of infection escalate in mid of January 2020.

AbCellera was awarded a four year contract by the United States Department of Defense Advanced Projects Research Agency (DARPA) to develop rapid countermeasures against viral outbreaks under Pandemic Prevention Platform (P3) program in 2018. Over the contract period, the company will receive funding of USD $30 million to establish an end-to-end platform for rapid pandemic response, to guide an international team of virologists, to discover antibodies, and subsequent gene therapy.

Under DARPA’s P3 program, AbCellera will apply its state-of-the art capabilities in human antibody discovery and immune profiling to establish rapid countermeasures for viral pandemics. Company will receive serum samples from patients infected with 2019-nCoV and will do identification of mAb candidates that could be used to treat 2019-nCoV infections.
DARPA has set a bold vision to establish effective response capabilities for such viral threats. Company has partnered with the Vaccine Research Center at National Institute of Allergy and Infectious Diseases (NIAID) USA and other researchers to test mAbs with prophylactic and therapeutic potential against 2019-nCoV. Besides AbCellera Biologics Inc., the United States Regeneron Pharmaceuticals Inc. and Vir Biotechnology Inc. are in race to develop mAbs based therapies and vaccines for treatment of 2019-nCov.

Novel Coronavirus infection cases are reported from several countries across Europe, North America and the Asia-Pacific. As on January 28, 2020, approximately 6061 cases have been confirmed. First death was confirmed on January 9 and since then 132 people have died with a case fatality rate of 2.2%.

India’s Union Health Minister Dr. Harsh Vardhan on 18th January 2020 said that, ‘about 29,707 passengers from 137 flights were screened for 2019-nCoV infection and no positive case was detected.’ Ministry also issued a fresh advisory asking passengers coming from or traveling to China to follow certain dos and don'ts.

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