BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

GeoVax, BravoVax to develop vaccine for coronavirus

January 30, 2020 | News

GeoVax will use its MVA-VLP vaccine platform and expertise to design and construct the vaccine candidate



US based GeoVax Labs, Inc., a biotechnology company developing human immunotherapies and vaccines against infectious diseases and cancer, together with BravoVax, a vaccine developer in Wuhan, China, has announced the signing of a Letter of Intent to jointly develop a vaccine against the new coronavirus (known as 2019-nCoV).

Under the collaboration, GeoVax will use its MVA-VLP vaccine platform and expertise to design and construct the vaccine candidate using genetic sequences from the ongoing coronavirus outbreak originating in Wuhan, China.

BravoVax will provide further development, including testing and manufacturing support, as well as direct interactions with Chinese public health and regulatory authorities.

GeoVax's Modified Vaccinia Ankara (MVA) platform technology is built on a 5th generation MVA vector system that is improved for high expression and stable transgenes during manufacture.

Similar to its parent MVA, it has the advantage of being a live replication-competent vector in avian cells for manufacturing, yet replication-deficient in mammalian cells for vaccination, thus inherently safe. Importantly, MVA vaccines elicit protective T cell as well as antibody responses in animals and humans.

The GeoVax MVA platform can be combined with the potent immunogenicity of Virus Like Particles (VLPs) (insertion of multiple antigens from each pathogen of interest conferring broad protection) or be used to express proteins in their native conformations, enabling construction of vaccine candidates that induce full protection after a single dose.

Single dose protection is a favourable characteristic of preventive vaccines for emerging infectious disease outbreak response, given the speed of spread of pathogens and the impracticality of multi-dose regimens in the under-resourced settings where outbreaks often occurs. MVA-VLP vaccine candidates against various virus families (e.g. Ebola, Marburg, Lassa and Zika) induced strong antibody and T cell responses and demonstrated broad protections after single dose vaccinations against lethal challenges.