

The vaccine is expected to provide long-lasting protection with a single dose administration with an anticipated safety profile similar to other licensed vaccines for active immunization

Vaccine manufacturer Indian Immunologicals Ltd (IIL) has entered into a research collaboration agreement with Australia's Griffith University to develop a lead vaccine candidate for Coronavirus.

As part of the cross-continental collaboration, scientists from IIL and the University will develop a 'Live Attenuated SARS – CoV-2 vaccine' or COVID-19 vaccine using the latest codon de-optimization technology.

Promising technology

"The technology looks promising for developing a vaccine for prophylactic, active, single dose immunization against coronavirus in humans, with an enhanced safety profile. The vaccine is expected to provide long-lasting protection with a single dose administration with an anticipated safety profile similar to other licensed vaccines for active immunization," a release from IIL on Tuesday said.

On completion of the research, the vaccine strain will be transferred to IIL and the vaccine maker will work accordingly with the country's regulator CDSCO (The Central Drugs Standard Control Organisation) to further conduct clinical trials which will be taken up in a

phased manner. IIL intends to use its existing Vero cell platform technology for mass production of the vaccine.

IIL Managing Director K. Anand Kumar said IIL has taken up this initiative to develop a vaccine candidate for the pandemic.

Deputy Managing Director Prasanna Deshpande said: "After evaluating various options being followed across the world, we decided to develop a Live Attenuated COVID-19 vaccine based on codon de-optimization technology. IIL is committed to developing high-quality vaccines that are affordable. We are confident that this new cross-continental collaboration will yield the desired results."

Highly effective and economical

"As this vaccine will be a live attenuated vaccine it is expected to be highly effective by providing very strong cellular and antibody immune responses against the virus. The other benefit of a live-attenuated vaccine is a proven track record for economical large-scale manufacturing and well-known regulatory approval pathway," said Suresh Mahalingam, Menzies Health Institute Queensland, Griffith University.

IIL is already working with Griffith University for conducting research and development of Zika virus vaccine which is currently at pre-clinical toxicology testing stage, the release said.