

# Singapore could have a Covid-19 vaccine by early 2021

© TUE, NOV 10, 2020 - 1:04 PM



Some 106 volunteers are enrolled in the early-stage trials in Singapore, of whom 28 received placebos. ST FILE PHOTO

[SINGAPORE] Singapore could have a Covid-19 vaccine by early next year.

The first shipments of the vaccine co-developed by Singapore researchers are expected in the first quarter.

Arcturus Therapeutics, the American pharmaceutical company working with Duke-NUS scientists on the vaccine, said this on Monday, as it announced positive preliminary results from the [early stage clinical trials ongoing](#) in Singapore.

Singapore's Economic Development Board (EDB) is pumping in some US\$45 million into the manufacture of the vaccine, said Arcturus.

EDB will also have the right to purchase up to S\$175 million of the vaccine at pre-negotiated prices, with shipments expected to begin in the first quarter of 2021, said Arcturus.

Duke-NUS Medical School's Ooi Eng Eong, who had co-developed the vaccine with Arcturus, said the results so far show that the vaccine could be effective as a single dose.

"This differentiates this investigational vaccine from many other Covid-19 vaccines in development," said Prof Ooi, who is also a member of Arcturus' Vaccine Platform Scientific Advisory Board. "The vaccine has the potential to provide important public health benefits by greatly facilitating broad administration across multiple populations worldwide."

Arcturus' chief financial officer Andy Sassine said the funds from Singapore will provide the firm with additional resources to sustain rapid scale up of (the vaccine) to meet the requirements of our existing Israeli and Singapore agreements as well as other potential supply deals in 2021.

The encouraging preliminary findings from the Singapore co-developed Covid-19 vaccine comes as the race to the vaccine heats up.

Earlier this week, Pfizer and BioNTech announced that their experimental vaccine is [90 per cent effective at preventing Covid-19](#). They are still awaiting data on safety, which could come later this month.

Some 106 volunteers are enrolled in the early-stage trials in Singapore, of whom 28 received placebos. Seventy-eight subjects received one dose of the vaccine, while the rest received two injections.

During these early-stage trials, researchers look out for dangerous side effects and analyse patient samples to see how the human immune system is responding to the vaccine.

They also seek to determine how many doses are needed to incite the desired immune response.

Preliminary findings indicate positive responses in both safety and human immune response.

Arcturus said no subjects have withdrawn from the study, and that there have been no serious adverse events deemed to be treatment related. As for the immune response, both antibody and T-cell response have been observed in volunteers.

*The Straits Times* had earlier reported that these later stage clinical trials could start before the end of this year.

Such trials are much larger in scope than the earlier ones, usually involving thousands to tens of thousands of people. These are often held across multiple jurisdictions or countries. The aim of these trials is to see if the vaccine can confer protection from infection.

THE STRAITS TIMES