Singapore’s vaccine could be ready for clinical trials by August

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Many companies and partnerships are in the race to develop a vaccine to stem the spread of Covid-19, with Singapore well in the hunt.

Duke-NUS Medical School in Singapore and United States-based Arcturus Therapeutics are now conducting pre-clinical studies on a vaccine candidate they have developed.

If the vaccine is seen to be safe in animals, it will be tested next on healthy adults.

Professor Ooi Eng Eong, the deputy director of the Emerging Infectious Diseases Programme at the school, said Duke-NUS hopes to start clinical trials as soon as August.

Singapore would own the rights to the vaccine here, while the US firm would be free to market it around the world.

The World Health Organisation said last week that there are three candidate vaccines being tested in clinical trials and 67 are in pre-clinical evaluation. The Arcturus/Duke-NUS one is in the latter group.

Many different types of vaccines are being developed as possible candidates.

The Arcturus/Duke-NUS initiative is around an mRNA vaccine.

This is a new technology and as yet none have been licensed for use, according to National University of Singapore’s Saw Swee Hock School of Public Health.

"In a pandemic like now, such vaccines have the advantage of being faster and cheaper to produce than conventional vaccines," said Prof Ooi. "And Arcturus has a unique type of mRNA technology that, if successful, can make the process even faster."

The WHO has said that vaccine development will take around 18 months and that would be a super fast-tracked process.

Arcturus Therapeutics research assistant Marion Hong conducting research on a vaccine for the coronavirus at a laboratory in San Diego last month. Duke-NUS Medical School in Singapore and Arcturus are now conducting pre-clinical studies on a vaccine candidate they have developed. PHOTO: REUTERS

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