

Senhwa Bio explores Silmitasertib for COVID-19 treatment

07 July 2020 | News

The new study revealed startling images that the new coronavirus causes infected cells to sprout tentacles



Taiwan absed Senhwa Biosciences, Inc., a clinical-stage biopharmaceutical company focused on Next Generation DNA Damage Response (DDR) therapeutics for the treatment of cancer, has announced that its drug Silmitasertib was again identified as one of the top potential treatments against COVID-19.

The latest international study led by Professor Nevan Krogan of University of California, San Francisco's Quantitative Biosciences Institute found that the Casein Kinase 2 (CK2) inhibitor, Silmitasertib, displayed robust antiviral activity in treating COVID-19, in vitro. Results were published in the June 28, 2020 issue of the scientific journal, Cell.

The new study revealed startling images that the new coronavirus causes infected cells to sprout tentacles - referred to as filopodia - which can poke holes in nearby cells and transfer the disease to them.

Tests and electron microscope photos showed that these filopodia contained high concentrations of coronavirus as well as CK2. The scientists, knowing that CK2 is being upregulated by the virus, selected Silmitasertib (as the only first-in-class CK2 inhibitor currently in clinical trials) and tested its anti-viral efficacy.

"We've tested a number of these kinase inhibitors and some are better than remdesivir," said UCSF's Director of the Quantitative Biosciences Institute, Professor Nevan Krogan.