

## New drug candidate for the treatment of COVID-19

October 30 2020



A colorized scanning electron micrograph of the SARS-CoV-2 virus. Credit: NIAID

Researchers from the University of Kent, the Goethe-University in Frankfurt am Main (Germany), and the Hannover Medical School (Germany) have identified a drug with the potential to provide a



treatment for COVID-19.

The international team led by Professor Martin Michaelis, Dr. Mark Wass (both School of Biosciences, University of Kent), and Professor Jindrich Cinatl (Institute of Medical Virology, Goethe-University) found that the approved protease inhibitor aprotinin displayed activity against SARS-CoV-2, the coronavirus that causes COVID-19, in concentrations that are achieved in patients. Aprotinin inhibits the entry of SARS-CoV-2 into host cells and may compensate for the loss of <u>host cell</u> protease inhibitors that are downregulated upon SARS-CoV-2 infection.

Aprotinin aerosols are approved in Russia for the treatment of influenza and could be readily tested for the treatment of COVID-19.

Professor Martin Michaelis said: 'The aprotinin aerosol has been reported to be tolerated extremely well in influenza patients. Hence, it may have a particular potential to prevent severe COVID-19 disease when applied early after diagnosis.'

**More information:** Aprotinin inhibits SARS-CoV-2 replication, *Cells*. DOI: <u>doi.org/10.3390/cells9112377</u>

Provided by University of Kent

Citation: New drug candidate for the treatment of COVID-19 (2020, October 30) retrieved 2 May 2024 from <u>https://medicalxpress.com/news/2020-10-drug-candidate-treatment-covid-.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.