



## TECHNOLOGY

# New Treatments for Viral Diseases

## OVERVIEW

Human viral epidemics have proliferated since the latter half of the 20th century. The same cannot be said of the medicines used to treat them. As HIV spreads to nearly every corner of the world, existing antivirals cannot fill the global need for inexpensive, easily accessible forms of treatment. New and potentially helpful drugs face a long and costly pipeline for development while older drugs are rendered useless by the virus' tendency to build up resistance.

Researchers at the University of Maryland have discovered that a currently available and widely used antibiotic offers a new approach to the treatment of viral disease. Long used to treat bacterial infections, the drug has recently been shown to alter a molecular process necessary for the assembly and growth of HIV and SARS viruses. In order for these viruses to replicate and spread, the balance between non-structural and structural proteins must stay at a "healthy" level. The drug alters this balance by increasing the ratio of non-structural to structural proteins, severely inhibiting virus replication in human cells. This antibiotic is already FDA approved and is available at a lower cost and lower toxicity than current drugs used to treat HIV. As an alternative and advantageous form of treatment, it may be used to supplement or replace existing drugs.

For additional information, please contact the Office of Technology Commercialization, University of Maryland College Park, via e-mail at [otc@umd.edu](mailto:otc@umd.edu) or phone at 301-405-3947.

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## Additional Information

### INSTITUTION

University of Maryland, College Park

### PATENT STATUS

Patent(s) pending

### LICENSE STATUS

Contact OTC for licensing information

### CATEGORIES

- Small molecules
- Therapeutics

- Repurpose Drug

## **EXTERNAL RESOURCES**

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