



EMORY
UNIVERSITY

“Our mission was to find and develop antiviral agents to address unmet medical needs, emerging and reemerging diseases, particularly in underserved populations. So when the call came for COVID 19, because of what we were doing, we were ready.”

—George Painter, Emory University scientist who led the discovery of molnupiravir

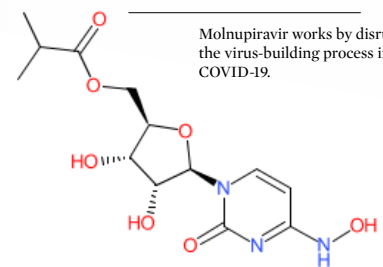
MOLNUPIRAVIR FACT SHEET

ABOUT MOLNUPIRAVIR

Molnupiravir was invented at Emory University. Drug Innovation Ventures at Emory (DRIVE) LLC, which was formed by Emory to develop early-stage drug candidates for viral diseases of global concern, advanced molnupiravir through an Investigational New Drug submission. On December 23, 2021, molnupiravir received Emergency Use Authorization from the U.S. Food and Drug Administration (FDA) for the treatment of COVID-19.

BACKGROUND

For several years, Emory scientists had been working on EIDD-2801, a drug candidate with potential as a treatment for several highly infectious and worrisome viral diseases, including influenza and Venezuelan Equine Encephalitis virus, some of which are biodefense threats. When the pandemic began, the team quickly turned its attention to developing EIDD-2801 as a treatment for COVID-19. DRIVE licensed EIDD-2801, now known as molnupiravir, to Ridgeback Biotherapeutics in 2020, which conducted the first human clinical trials and then partnered with Merck.





HOW DOES MOLNUPIRAVIR WORK?

Molnupiravir disrupts the process by which SARS-CoV-2 duplicates itself in host cells by inserting errors into the virus's genetic code.

WHAT DOES ITS NAME MEAN?

The name molnupiravir refers to the hammer—Mjölnir—of the Norse god and Marvel superhero Thor. The suffix “vir” is frequently used in naming antiviral drugs.

ABOUT DRIVE

Emory formed DRIVE to advance the development of early-stage drug candidates to address viral diseases of global concern. DRIVE applies an entrepreneurial mindset and the focus of a biotechnology company to address the world's need for therapies that end pandemics. By taking advantage of Emory's renowned research enterprise, DRIVE increases the probability that promising drugs will be developed for the ultimate benefit of humanity.

ABOUT EMORY UNIVERSITY

As one of the nation's leading research universities, Emory University's mission is to create, preserve, teach, and apply knowledge in the service of humanity. Emory has discovered and advanced the development of some of the world's most important and valuable antiviral drugs, successfully taking treatments from bench to bedside.

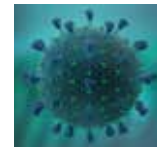
2013: Emory begins screening ribonucleoside analogs against equine encephalitis viruses (EEVs). Spread by mosquitoes, EEVs can be fatal and were weaponized during the Cold War.



2016: Emory receives Defense Threat Reduction Agency contract to develop countermeasures against EEVs.

2019: Emory receives NIH award to develop antivirals against influenza.

March 2020: DRIVE licenses EIDD-2801 to Ridgeback Biotherapeutics as a potential COVID-19 therapy.



COVID-19

April 2020: FDA grants DRIVE an Investigational New Drug application. Ridgeback begins Phase I clinical trials.

May 2020: Ridgeback partners with Merck.

September 2020: Merck and Ridgeback begin pivotal Phase 2/3 clinical trial.

Oct 2021: Merck submits Emergency Use Authorization application to the FDA.

Nov 2021: Britain becomes the first country to approve molnupiravir for COVID-19.

Dec 2021: Molnupiravir receives Emergency Use Authorization from the FDA for the treatment of COVID-19.

