

## A Novel Oral Antiviral Drug for COVID-19. Can It Make a Difference?

Countries worldwide strive to vaccinate their citizens against the virus that brings about COVID-19. Not only developed countries but also developing ones have had success in vaccinating a huge number of people. However, advanced and improved treatments are still required to reduce hospitalizations and deaths and prevent virus propagation. Therefore, it is important to recognize that, despite being vaccinated, there is still a need for alternative and more effective COVID treatment options.<sup>1</sup> In the quest to create a solution for battling COVID-19, antiviral medicine was developed. The good thing about this solution is that it can be taken orally rather than intravenously, provided outside of a hospital setting before COVID-19 has progressed to a critical level.<sup>1,2</sup>

On November 4, 2021, the MHRA (Medicines and Healthcare products Regulatory Agency) stated that Lagevrio, also known as Molnupiravir antiviral drug, is a better and more efficient solution for mild-to-moderate COVID-19 infection. In addition, patients who have risk factors of heart disease, obesity, old age, and diabetes mellitus are more likely to develop other severe ailments.<sup>1</sup> This medication can also minimize the risk of hospitalization and mortality in infected individuals. Based on the positive results of human studies, this drug was licensed as the first oral antiviral tablet for the treatment of COVID-19.<sup>1</sup>

Molnupiravir is a broad-spectrum antiviral Ribonucleoside analogue. It inhibits the replication of the virus by targeting viral RNA-dependent RNA polymerase and encouraging RNA mutations.<sup>2</sup> This medication acts by interfering with virus replication. It imitates one of the building blocks of the viral gene. When the virus replicates, it creates a new RNA replica, and the medicine becomes incorporated. This keeps the virus from growing, keeping

viral levels in the body low and decreasing the impact of the malady.<sup>3</sup> Based on human trials, the MHRA recommends using this tiny miracle as soon as the covid-19 test results are positive and within five days after the onset of symptoms, as its benefits are proven to be promising during the early stages of illness.<sup>1</sup>

This antiviral tablet not only works against COVID-19 but is also a broad-spectrum drug that can work against various viruses. This antiviral was previously developed for seasonal influenza in 2013. However, when COVID-19 was identified, it was tested to be effective against SARS-CoV-2 and might be utilized to treat various diseases in the future.

### REFERENCES

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