



December 23, 2021

****Emergency Use Authorization**** **Molnupiravir for Treatment of COVID-19**

Mechanism of action^{1,2}:

Molnupiravir is an orally-administered nucleoside analogue that inhibits SARS-CoV-2 replication by introducing errors into the virus' genetic code (viral mutagenesis). Molnupiravir is an investigational drug and is not approved for any uses, including use for the treatment of coronavirus disease (COVID-19).

Current Status & Indications^{1,2}:

On December 23, 2021, the U.S. Food and Drug Administration issued an [emergency use authorization](#) (EUA) for molnupiravir for the treatment of mild-to-moderate COVID-19 in certain adults [who are at high risk for progression to severe COVID-19](#), including hospitalization and death.

Molnupiravir **may only be used** for the treatment of mild-to-moderate COVID-19 **in adults**:

- With positive results of direct SARS-CoV-2 viral testing, and
- Who are at high-risk for progression to severe COVID, including hospitalization and death, and
- **For whom alternative COVID-19 treatment options authorized by FDA are not accessible or clinically appropriate.**

Availability¹:

Distribution of the authorized molnupiravir will be controlled by the United States (U.S.) Government for use consistent with the terms and conditions of this EUA. Merck will supply molnupiravir to authorized distributor(s), who will distribute to healthcare facilities or healthcare providers as directed by the U.S. Government, in collaboration with state and local government authorities as needed. The IHS National Supply Service Center anticipates that ordering will be available for IHS facilities in a limited capacity during the month of January 2022.

Limitations of Authorized Use^{1,3}:

Molnupiravir is not authorized for use;

- In patients who are less than 18 years of age
- For initiation of treatment in patients requiring hospitalization due to COVID-19.
- As pre-exposure or as post-exposure prophylaxis for prevention of COVID-19.
- For duration longer than 5 consecutive days.

Molnupiravir is not a substitute for vaccination in individuals for whom COVID-19 vaccination and a booster dose are recommended.

Efficacy and Safety^{2,3}:

The primary data supporting this EUA are from the [MOVE-OUT Trial](#), a phase 2/3 randomized, double-blind, placebo-controlled clinical trial in non-hospitalized adults with lab-confirmed SARS-CoV-2 infection within 5 days prior to randomization and symptomatic mild-to-moderate COVID-19 who are at high risk for progression to severe COVID-19. Participants were adults 18 years of age and older with a pre-specified medical condition or at increased risk of SARS-CoV-2 infection for other reasons who had not received a COVID-19 vaccine.

The main outcome in the trial was the percentage of participants who were hospitalized or died due to any cause during 29 days of follow-up. In this trial, 709 people received molnupiravir and 699 received a placebo. In the primary analysis, molnupiravir recipients saw a 30% reduced risk of hospitalization and death from any cause during 29 days of follow-up compared to those with placebo, a statistically significant difference.

Possible side effects of molnupiravir include: diarrhea, nausea, and dizziness. Discontinuation of study intervention due to an adverse event occurred in 1% of subjects receiving molnupiravir and 3% of subjects receiving placebo.

Dosage and Administration^{2,3}:

The dosage for molnupiravir is 800 mg (four 200 mg capsules) taken orally every 12 hours for 5 days. Completion of the full 5-day treatment course and continued isolation in accordance with public health recommendations are important to minimize transmission of SARS-CoV-2.

The 5-day treatment course of molnupiravir should be initiated as soon as possible after a diagnosis of COVID-19 has been made, and within 5 days of symptom onset. Should a patient require hospitalization due to severe or critical COVID-19 after starting treatment with molnupiravir, the patient should complete the full 5-day treatment course per the healthcare provider's discretion. Molnupiravir is not authorized for use longer than 5 consecutive days because the safety and efficacy have not been established.

Warnings and Precautions³:

- **Reproductive Concerns:** Based on findings from animal reproduction studies, molnupiravir may cause fetal harm when administered to pregnant individuals. **Therefore, molnupiravir is not recommended for use during pregnancy.** Females of childbearing potential are advised to use a reliable method of birth control correctly and consistently during treatment with molnupiravir and for four days after the final dose. Males of reproductive potential who are sexually active with females of childbearing potential are advised to use a reliable method of birth control correctly and consistently during treatment with molnupiravir and for at least three months after the final dose.
- **Lactation:** Breastfeeding is not recommended during treatment and for four days after the last dose of molnupiravir.
- **Bone and Cartilage Toxicity:** Molnupiravir is not authorized for use in patients less than 18 years of age because it may affect bone and cartilage growth.

Current EUA Fact Sheets for Molnupiravir:

- ❖ (1) [Healthcare Providers](#)
- ❖ (2) [Patients and Caregivers](#)
- ❖ (3) [Frequently Asked Questions on the EUA for molnupiravir](#)

Required Reporting for Serious Adverse Events and Medication Errors under the EUA³:

The prescribing healthcare provider and/or the provider's designee is/are responsible for mandatory reporting of all serious adverse events and medication errors potentially related to molnupiravir within 7 calendar days from the healthcare provider's awareness of the event. The FDA recommends that reports, using FDA Form 3500, include:

- Patient demographics and baseline characteristics (patient identifier, age or DOB, gender, weight, ethnicity, and race)
- A statement "Molnupiravir use for COVID-19 under Emergency Use Authorization (EUA)" under the "Describe Event, Problem, or Product Use/Medication Error" heading
- Information about the serious adverse event or medication error (e.g., signs and symptoms, test/laboratory data, complications, timing of drug initiation in relation to the occurrence of the event, duration of the event, treatments required to mitigate the event, evidence of event improvement/disappearance after stopping or reducing the dosage, evidence of event reappearance after reintroduction, clinical outcomes)
- Patient's preexisting medical conditions and use of concomitant products
- Information about the product (e.g., dosage, route of administration, NDC #)

Submit adverse event reports to **FDA MedWatch** using one of the following methods:

1. Complete and submit the report online: www.fda.gov/medwatch/report.htm or
2. Complete and submit a postage-paid FDA Form 3500: www.fda.gov/media/76299/download

*****Federal, Tribal, and Urban programs are all encouraged to put "IHS" into field #26 of the reporting forms*****

References:

1. Food and Drug Administration. Molnupiravir [Letter of Authorization](#). Published online December 23, 2021.
2. Food and Drug Administration. FDA News Release. [FDA Authorizes Additional Oral Antiviral for Treatment of COVID-19 in Certain Adults](#). Published online Dec 23, 2021.
3. Food and Drug Administration. Molnupiravir: [Fact Sheet for Healthcare Providers](#). December 23, 2021.
4. Food and Drug Administration. Molnupiravir: [Fact Sheet for Patients and Caregivers](#). December 23, 2021.
5. Food and Drug Administration. Molnupiravir: [Frequently Asked Questions on the Emergency Use Authorization for Molnupiravir for Treatment of COVID-19](#). December 23, 2021.