

December 23, 2021

## IMPORTANT DRUG WARNING

**Subject: Important Safety Information Regarding Use of Molnupiravir in Pregnancy and Individuals of Childbearing Potential**

**Dear Healthcare Provider:**

The purpose of this letter is to inform you of important safety information regarding the use of molnupiravir in pregnancy and in individuals of childbearing potential. Molnupiravir is an investigational nucleoside analogue that inhibits severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) replication.

Molnupiravir is an unapproved product that was authorized by the FDA on [EUA date] under an Emergency Use Authorization (EUA) for the treatment of mild-to-moderate COVID-19 in adults with a positive result of direct SARS-CoV-2 viral testing who are at high risk for progression to severe COVID-19, including hospitalization or death, and for whom alternative COVID-19 treatment options authorized by FDA are not accessible or clinically appropriate.

This letter will provide information regarding the potential risks of molnupiravir use during pregnancy, requirements for healthcare providers prior to initiating treatment with molnupiravir during pregnancy, and how to report pregnancy exposures and outcomes.

### **Use of Molnupiravir in Pregnancy and in Individuals of Childbearing Potential**

Molnupiravir is not recommended for use during pregnancy.

Based on findings from animal reproduction studies, molnupiravir may cause fetal harm when administered to pregnant individuals. There are no available human data on the use of molnupiravir in pregnant individuals to evaluate the risk of major birth defects, miscarriage, or adverse maternal or fetal outcomes. Please refer to the Animal Data section below for more details.

### **Healthcare Provider Action**

Prior to initiating treatment with molnupiravir:

- Assess whether an individual of childbearing potential is pregnant or not, if clinically indicated. Refer to Warnings and Precautions (5.1) and Use in Specific Populations (8.3) of the [Fact Sheet for Healthcare Providers](#).
- If molnupiravir is used during pregnancy, the prescribing healthcare provider must communicate to the patient the known and potential benefits and the potential risks of using molnupiravir during pregnancy, as outlined in the “Fact Sheet for Patients and Caregivers.” Also see Warnings and Precautions (5.1, 5.2), Use in Specific Populations (8.1, 8.3) and Nonclinical Toxicology (13.1) of the Fact Sheet for Healthcare Providers.
- If the decision is made to use molnupiravir during pregnancy, the prescribing healthcare provider must document that the known and potential benefits and potential risks of using

molnupiravir during pregnancy were communicated to the pregnant individual as outlined in the “Fact Sheet for Patients and Caregivers”.

- The prescribing healthcare provider must document that a pregnant individual was made aware of Merck Sharp & Dohme Corp.’s (“Merck”) pregnancy surveillance program at 1-877-888-4231 or [pregnancyreporting.msd.com](https://pregnancyreporting.msd.com).
- Advise individuals of childbearing potential of the potential risk to a fetus and to use an effective method of contraception, correctly and consistently, during treatment with molnupiravir and for 4 days after the last dose of molnupiravir.
- Advise individuals of childbearing potential to inform their healthcare provider of a known or suspected pregnancy.

### **Reporting Molnupiravir Pregnancy Exposures and Pregnancy Outcomes**

Merck has a pregnancy surveillance program to collect pregnancy outcomes in individuals exposed to molnupiravir during pregnancy.

Encourage participation and advise patients about how they may enroll in the pregnancy surveillance program.

Health care providers should report molnupiravir pregnancy exposure to Merck at 1-877-888-4231 or [pregnancyreporting.msd.com](https://pregnancyreporting.msd.com).

If the pregnant individual agrees to participate in the pregnancy surveillance program and allows the prescribing healthcare provider to disclose patient specific information to Merck, the prescribing healthcare provider must provide the patient’s name and contact information to Merck.

Advise patients who have taken molnupiravir during pregnancy to report their pregnancy to Merck at 1-877-888-4231 or [pregnancyreporting.msd.com](https://pregnancyreporting.msd.com).

### **Animal Data**

Molnupiravir is the prodrug of the nucleoside analogue N-hydroxycytidine (NHC). In an embryofetal development (EFD) study in rats administered molnupiravir during the organogenesis period (gestation days 6 through 17), developmental toxicities including post-implantation losses, malformation of the eye, kidney and axial skeleton, and rib variations were observed at 8-times the human NHC exposure at the recommended human dose (RHD). At this exposure, rat maternal toxicities included decreased food consumption and body weight losses, resulting in the early sacrifice of two of sixteen animals. Decreased fetal weight and delayed fetal ossification as well as maternal decreased body weight gain were observed at 3-times the human NHC exposure at the RHD.

In an EFD study in rabbits administered molnupiravir during the organogenesis period (gestation days 7 through 19), developmental toxicity was limited to reduced fetal body weight at 18-times the human NHC exposure at the RHD. There was no developmental toxicity at 7 times the human NHC exposure at the RHD.

In a pre- and post-natal developmental study, molnupiravir was administered orally to female rats at exposures (similar to the human NHC exposure at the RHD) from GD6 through lactation day 20. No effects were observed in offspring.

## **Important Prescribing Information**

Molnupiravir is authorized for 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-19, including hospitalization or death. Refer to CDC website<sup>1</sup> for additional details, and for
- whom alternative COVID-19 treatment options authorized by FDA are not accessible or clinically appropriate.

Molnupiravir is not authorized for use in patients who are less than 18 years of age.

Molnupiravir is not authorized for initiation of treatment in patients hospitalized due to COVID-19.

Molnupiravir is not authorized for use for longer than 5 consecutive days.

Molnupiravir is not authorized for pre-exposure or post-exposure prophylaxis for prevention of COVID-19.

Molnupiravir may only be prescribed for an individual patient by physicians, advanced practice registered nurses, and physician assistants that are licensed or authorized under state law to prescribe drugs in the therapeutic class to which molnupiravir belongs (i.e., anti-infectives).

The molnupiravir dosage regimen is 800 mg (four 200 mg capsules) taken orally every 12 hours for 5 days, with or without food.

## **Reporting Adverse Events**

Healthcare Providers or their designee must report serious adverse events and medication errors potentially related to molnupiravir within 7 calendar days from the Healthcare Provider's awareness of the event by (1) submitting FDA Form 3500 online, (2) by downloading this form and then submitting by mail or fax, or (3) contacting the FDA at 1-800-FDA-1088 to request this form. Providers can report any adverse events associated with the use of molnupiravir to Merck at 1-800-672-6372.

If you require further information about the information contained in this letter, please contact the Merck National Service Center at 1-800-672-6372.

This letter is not intended as a complete description of the benefits and risks related to the use of molnupiravir. Please refer to the full prescribing information in the [Fact Sheet for Healthcare Providers](#).

The EUA Letter of Authorization, the Fact Sheet for Healthcare Providers, and the Fact Sheet for Patients and Caregivers are also available at [molnupiravir-us.com](http://molnupiravir-us.com)

Sincerely,

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<sup>1</sup> <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>. Healthcare providers should consider the benefit-risk for an individual patient.

Merck Professional Services