Summary of Clinical Study Results

A clinical study of molnupiravir to prevent COVID-19 (MK-4482-013)

This study summary is an overview of the study results. It's intended to help the people who took part in the study understand the results. This study summary:

- Does not replace your healthcare professional's advice;
- Is not a recommendation of how to use the studied medicine*;
- Is not prescribing advice; and
- Does not mean that the studied medicine, or the studied use of the medicine, has been shown to be safe or to work.

You should always talk to a healthcare professional about any treatment decisions. If you participated in this study and have questions about it or the study results, please speak with the study staff.

This study may include treatment plans, medicines, or uses of medicines that have not been approved by your government health authority. The information in this study summary:

- Is from this study only;
- May be different from information in other studies; and
- Does not reflect all information about the studied medicine.

Different studies may be designed to look at different questions or may reach different results. Researchers must look at results from many types of studies to understand if a studied medicine works for a specific use and to learn about its safety.

When a government health agency approves a new medicine, or a new use of a medicine, this is described in the medicine's approved labeling. If the medicine or use explored in this study gets approved, information from this study may or may not be included in the medicine's approved labeling. Check with your healthcare professional, your country's health agency, or your country's MSD office for any approved labeling for this medicine in your country.

*In this statement, the word "medicine" includes drugs, vaccines or other preventative agents.

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A clinical study of molnupiravir to prevent COVID-19 (MK-4482-013)

Full study title:

A Phase 3, Multicenter, Randomized, Double-blind, Placebo-controlled Study to Evaluate the Efficacy and Safety of MK-4482 for the Prevention of COVID-19 (Laboratory-confirmed SARS-CoV-2 Infection With Symptoms) in Adults Residing With a Person With COVID-19.

Who sponsored this clinical study?

Merck Sharp & Dohme LLC (Rahway, NJ, USA) sponsored this study.

Protocol number: MK-4482-013

EU Clinical Trial Number: not applicable

Other identifiers

EudraCT number: 2021-000904-39
US NCT number: NCT04939428

Date: 14-Dec-2023

Thank you!

Thank you to those who took part in this clinical study, their families and care givers. You helped researchers learn more about molnupiravir.

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What is a clinical study?

A clinical study is a type of research designed to learn more about how the body responds to medicines or other treatments.

Researchers look at the results of many clinical studies to understand which treatments work and how they work. It takes lots of people in many clinical studies all around the world to advance medical science. This summary only shows the results from this one clinical study. Other clinical studies may show different results.

What were the goals of this clinical study?

The goals of this study were to learn if the study medicine called **molnupiravir** can prevent COVID-19 and to learn about its safety in people who:

- Have not received a vaccination (unvaccinated) for COVID-19, and
- Live with a person who has COVID-19

COVID-19 (coronavirus disease 19) is a virus that most often causes flu- or cold-like symptoms. Most people with COVID-19 have mild symptoms, but some people can have severe illness.

Many people have received a vaccination to prevent severe illness from COVID-19. Researchers believe people who are unvaccinated for COVID-19 and live with a person who has COVID-19 will have a higher chance of getting COVID-19.

Researchers designed molnupiravir to stop the COVID-19 virus from multiplying. Researchers wanted to learn if molnupiravir could lower the chance a person will get COVID-19.

The main goals of this study were to learn:

- About the safety of molnupiravir
- If people tolerate molnupiravir
- If molnupiravir will prevent an unvaccinated person from getting COVID-19 when they live with a person who has it

What kind of study was this?

This was a randomized, double-blind, phase 3 clinical study.

- **Randomized** means that researchers assigned people by chance to a treatment group
- **Double-blind** means that neither the people in the study nor the researchers knew which study treatment a person received
- A **phase 3** clinical study learns if the study treatment works in a large number of people

When did this study start and end?

This study started in August 2021 and ended in November 2022.

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Who took part in this study?

1,539 people who were living with someone who had COVID-19 started this study. There were 708 men and 831 women. They were between the ages of 18 and 96 years old.

People could take part in the study if they:

- Had not received a vaccination for COVID-19
- Did not have COVID-19 when they joined the study
- Lived in the same house with someone who in the past 5 days:
    - Tested positive for the COVID-19 virus (which means they had COVID-19)
    - Had at least one symptom of COVID-19

This study took place at sites in 19 countries. The table below shows the number of people who took part in each country.

Country	Number of people	Country	Number of people
Argentina	10	Mexico	161
Brazil	8	Philippines	21
Bulgaria	73	Romania	37
Columbia	214	Russian Federation	175
Egypt	74	South Africa	119
France	1	Thailand	9
Guatemala	22	Turkey	5
Hungary	10	Ukraine	164
Japan	22	United States	409
Kenya	5	**TOTAL**	**1,539**

38 people did not finish the study as planned. This table shows the reasons.

Reason people did not finish the study	Number of people
They decided to stop taking part in the study	21
The researchers were unable to contact them	5
The researchers decided they should not continue in the study	1
They were not given the study treatment because they were accepted into the study by mistake	1
They died (1 person who received placebo died during the study. Researchers do not believe this death was related to the placebo.)	1
Other reasons	9

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What treatment was studied?

Researchers assigned people by equal chance to take 1 of 2 treatments:

- **Molnupiravir**, the study medicine
- **Placebo**, which looks like the study medicine but has no study medicine in it. Using a placebo helps researchers better understand the real effects of the study medicine.

What happened during this clinical study?

Before study treatment

People in the study lived in the same house with a person (called a housemate) who within the past 5 days tested positive for COVID-19 virus and had at least one symptom of COVID-19. These housemates did not receive treatment as part of this study.

During study treatment

1,528 out of 1,539 people (99%) who started the study received at least 1 dose of molnupiravir or placebo. 11 people were assigned treatment but didn't start the study or receive any treatment.

People took molnupiravir or placebo by mouth as a capsule 2 times a day for 5 days.

People were tested for the COVID-19 virus on:

- Day 1 of study treatment
- Day 5 of study treatment
- 2 weeks after starting study treatment
- About 1 month after starting study treatment

To test for the COVID-19 virus, the researcher swabbed the inside of a person's nose and sent the swab to a lab. The lab tested the swab to find out if the results were:

- "**Negative**", which means that the test did not find the virus that causes COVID-19 on the swab
- "**Positive**", which means that the test found the virus that causes COVID-19 on the swab

People also completed a paper diary every day for about a month starting on Day 1. In this diary, people answered questions about whether they had certain symptoms of COVID-19 during the past 24 hours. A person contacted the researchers if they had one or more of the symptoms listed in the diary.

Researchers considered people with both symptoms of COVID-19 and a positive test result to have COVID-19.

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What were the overall results of this clinical study?

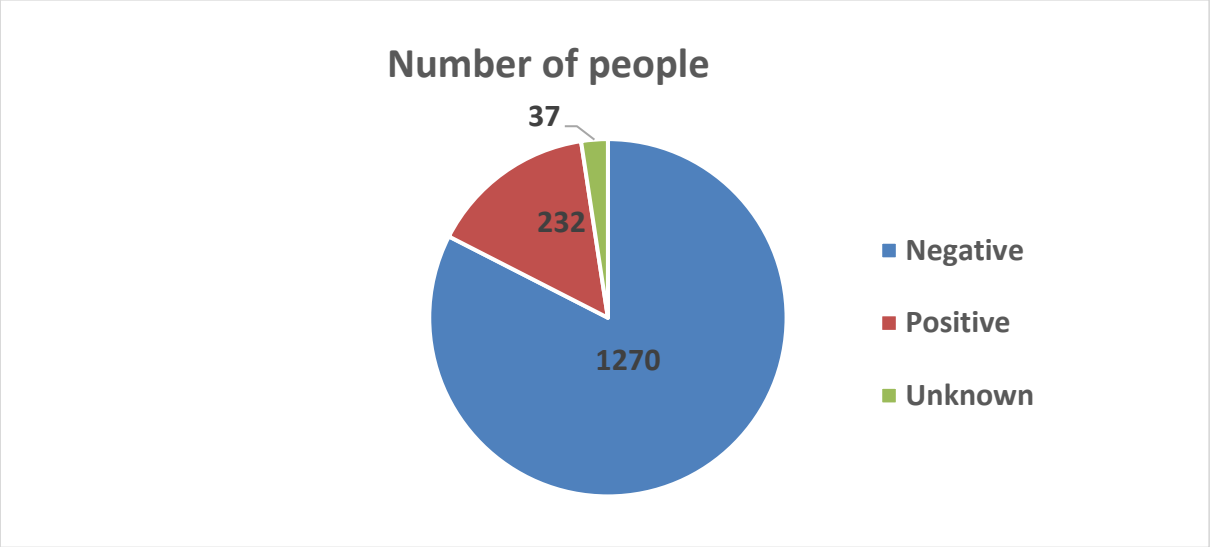
Researchers learned that a similar number of people who received molnupiravir or placebo:

- Developed COVID-19 within 2 weeks of starting treatment. People who were missing information such as a required COVID-19 test, or diary entry were also counted as testing positive for the COVID-19 virus. Researchers did not consider the difference in the numbers meaningful.
- Had a health problem called an **adverse event (AE)**. AEs are health problems that happen or worsen during the study. AEs may or may not be caused by the treatment a person received in a study.
- Stopped treatment because of an AE

How did the researchers measure if molnupiravir prevented COVID-19?

To learn if molnupiravir prevented COVID-19, researchers looked at the number of people who tested negative for the COVID-19 virus on Day 1 and then tested positive for the COVID-19 virus within 2 weeks of starting treatment. People who were missing information such as a required COVID-19 test, or diary entry were also counted as testing positive for the COVID-19 virus.

Of the 1,539 people who started in the study, the test result for COVID-19 on Day 1 is shown below.



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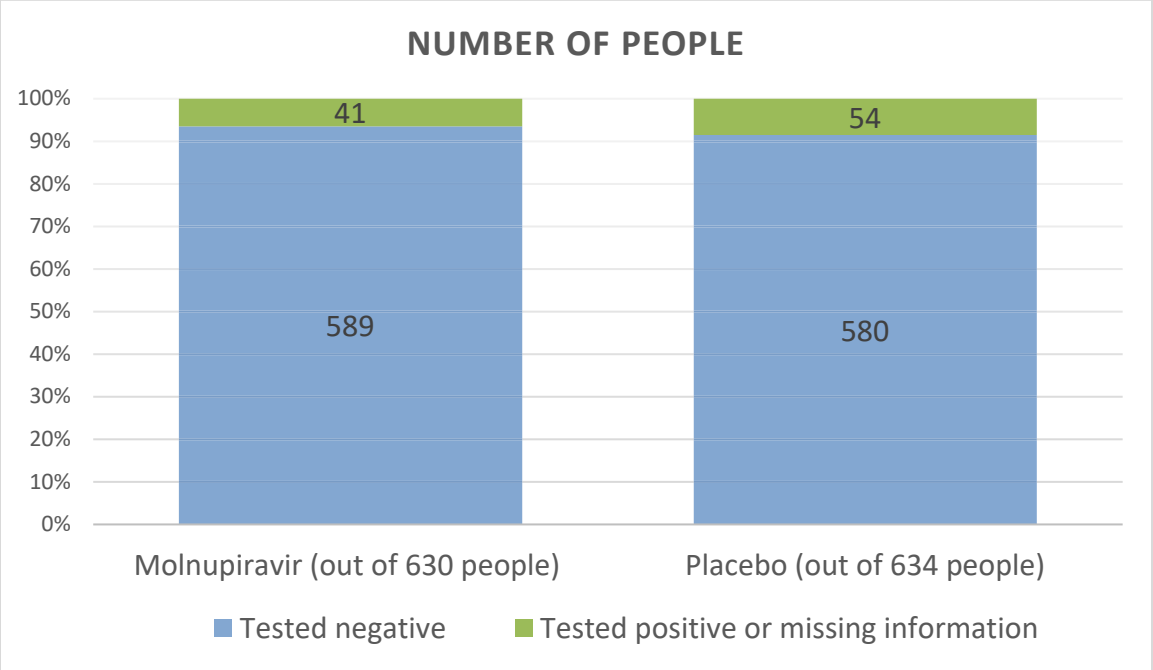
How many people developed COVID-19 within 2 weeks of starting treatment?

Of the 1,270 people who tested negative for the COVID-19 virus on Day 1, 1,264 people received at least one dose of molnupiravir or placebo. Of these 1,264 people, a similar number of people in each group developed COVID-19 within 2 weeks of starting treatment. This included people who were missing information such as a required COVID-19 test or diary entry. Researchers did not consider the difference in the numbers meaningful.



How did researchers measure the safety of molnupiravir and if people tolerate it?

During the study, researchers looked at the number people who received at least one dose of treatment and:

- Had an AE
- Stopped treatment because of an AE

How many people had an AE or stopped treatment because of an AE?

A similar number of people who received molnupiravir or placebo had an AE or stopped treatment because of an AE. The table below shows the number of people who had an AE and stopped treatment because of an AE.

Number (%) of people who had an AE or stopped treatment due to an AE		
	Molnupiravir (out of 763 people)	**Placebo (out of 765 people)**
Had an AE	94 (12%)	105 (14%)
Stopped treatment due to an AE	3 (Less than 1%)	1 (Less than 1%)

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What adverse reactions did people report during this clinical study?

In addition to adverse events, researchers also looked at adverse reactions a person had during this study. **Adverse reactions** are health problems that happen or worsen during a study that the researchers believe **could be related to the treatment** the person received.

This summary only provides information on the adverse reactions recorded during this study. Other studies may record different adverse reactions.

What's the difference between an adverse event and an adverse reaction?

Adverse events are health problems that happen or worsen during a clinical study. Adverse events **may or may not** be caused by the treatment a person received in a study.

Adverse reactions are health problems that the researcher believes **could be related to the treatment** the person received during a clinical study.

What serious adverse reactions were reported?

An adverse reaction is considered serious when it:

- Is life-threatening
- Causes lasting problems
- Requires hospital care
- Results in death

No person reported a serious adverse reaction during the study.

What were the most common non-serious adverse reactions reported?

27 out of 1,528 people (2%) had a non-serious adverse reaction. The table below shows the most common non-serious adverse reactions that happened in 2 or more people in any group who received at least one dose of treatment:

Non-serious adverse reactions	Number (%) of people	
	Molnupiravir (out of 763 people)	Placebo (out of 765 people)
Feeling sick to one's stomach	4 (0.5%)	2 (0.3%)
Heartburn	1 (0.1%)	4 (0.5%)
Frequent, loose watery stools	2 (0.3%)	2 (0.3%)
Higher levels of amylase in a blood test – amylase helps you digest carbohydrates	1 (0.1%)	2 (0.3%)
Lower level of phosphorous (a mineral) in a blood test	0 (0%)	2 (0.3%)
Upset stomach	0 (0%)	2 (0.3%)

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What did researchers learn from this study?

The results from this study may help researchers learn more about molnupiravir.

Are there plans for future clinical studies?

Researchers may continue to do clinical studies to learn more about molnupiravir.

Where can I find more information about this clinical study?

To learn more about this clinical study, visit:

- ClinicalTrials.gov at Study of MK-4482 for Prevention of Coronavirus Disease 2019 (COVID-19) in Adults (MK-4482-013) - Full Text View - ClinicalTrials.gov
- European Union clinical register at Clinical Trials register - Search for MK-4482-013

For questions about this summary, contact the clinical study sponsor, Merck, Sharp & Dohme LLC (Rahway, NJ, USA), at: ClinicalTrialsDisclosure@merck.com.