AstraZeneca

Clinical Study Results

Research Sponsor: Acerta Pharma B.V., a member of the AstraZeneca group

Drug Studied: Acalabrutinib

Study Purpose: This study was done to learn how acalabrutinib works and about its safety in participants with COVID-19 who need hospital care

Protocol Number: D822FC00001

Thank you

Thank you for taking part in the clinical study for the study drug acalabrutinib.

You and all of the participants helped researchers learn more about acalabrutinib to help people with COVID-19 who need hospital care.

Acerta Pharma B.V. sponsored this study and believes it is important to share the results of the study with you and the public. An independent non-profit organization called CISCRP helped prepare this summary of the study results for you. We hope it helps you understand and feel proud of your important role in medical research.

If you participated in the study and have questions about the results, please speak with the study doctor or staff at your study site.

Overview of this study

Why was the research needed?

Researchers are looking for a better way to treat people who have COVID-19 and need hospital care. Before a drug can be approved for people to take, researchers do clinical studies to find out how it works and how safe it is.

What treatment did the participants take?

The participants in this study took either:

- acalabrutinib and "best supportive care", also called BSC
- BSC only

What were the results of this study?

The main questions the researchers wanted to answer in this study were:

- **Did acalabrutinib help the participants stay alive and breathe without help?**

  No. Overall, the researchers found that acalabrutinib did not help the participants stay alive and breathe without help.

- **What medical problems did the participants have during this study?**

  There were 15.1% of participants who took acalabrutinib and BSC who had medical problems that the study doctors thought might be related to acalabrutinib during the study. The most common medical problem was a headache.

More details about the results of this study are included later in this summary.

Where can I learn more about this study?

You can find more information about this study on the websites listed on the last page. When a full report of the study results is available, it also can be found on those websites.

Who took part in this study?

The researchers asked for the help of men and women with COVID-19 who needed hospital care. Participants in this study either were unable to breathe enough oxygen on their own, or were getting extra oxygen in the hospital. The participants in this study were 26 to 98 years old when they joined.

The study included 177 participants in Argentina, Brazil, Chile, France, India, Italy, Japan, Mexico, Peru, Russia, South Africa, and Turkey.

Why was the research needed?

Researchers are looking for a better way to treat COVID-19 in people whose infection is severe enough that they need hospital care. Before a drug can be approved for people to take, researchers do clinical studies to find out how it works and how safe it is.

In this study, the researchers wanted to find out if acalabrutinib worked in a small number of participants with COVID-19 who needed hospital care. They also wanted to find out if the participants had any medical problems during the study.

COVID-19 is an infectious disease that can cause swelling in the airways and lungs. This can lead to lung damage, difficulty breathing, and other medical problems. If the swelling is severe, people who have COVID-19 may need a breathing tube and a ventilator to help them breathe.

The study drug, acalabrutinib, is used to treat certain types of cancer. But, in animal studies, researchers have found that acalabrutinib may also reduce swelling in the lungs. Based on the results from these animal studies, researchers thought that acalabrutinib might be able to decrease swelling in the lungs and airways in patients who have COVID-19.

What was the purpose of this study?

The main questions the researchers wanted to answer in this study were:

- Did acalabrutinib help the participants stay alive and breathe without help?
- What medical problems did the participants have during this study?

The answers to these questions are important to know before other studies can be done to find out if acalabrutinib helps improve the health of people with COVID-19.

What treatments did the participants take?

The participants in this study took either:

- acalabrutinib and "best supportive care", also called BSC
- BSC only

BSC was decided for each participant by their study doctor and the guidelines at the hospital. The participants who took acalabrutinib took it as a capsule by mouth. The doses of acalabrutinib were measured in milligrams, also known as mg.

This was an "open-label" study. This means the participants, researchers, study doctors, and other study staff knew what each participant was taking.

A computer program was used to randomly choose the treatment each participant took. This helps make sure the groups are chosen fairly. Researchers do this so that comparing the results of each treatment is as accurate as possible.

The participants took study treatment while they were already in the hospital because of COVID-19.

The chart below shows the treatments the participants took.

	Acalabrutinib and BSC	BSC only
	89 participants	88 participants
	• 100 mg of acalabrutinib as a capsule by mouth • BSC as decided by the study doctors	• BSC as decided by the study doctors
	• acalabrutinib twice a day for 10 days • BSC as decided by the study doctors	• BSC as decided by the study doctors

What happened during this study?

The participants were in the study for about 3.5 months. But, the entire study took 5 months to finish.

The study started in June 2020 and ended in November 2020.

The chart below shows what happened during the study.

Before the participants took study treatment

1 visit

The study doctors:

- checked the health of the participants to make sure they could join the study
- did a test to check if the participants had COVID-19
- did a physical exam and asked about the participants' medications and any medical problems
- checked the participants' heart health using an electrocardiogram, also called an ECG, and using an echocardiogram for some participants
- checked the participants' lung health using CT or X-ray scans
- took blood and urine samples

Up to 1 week

While the participants took study treatment

Up to 10 visits from the study doctors while the participants were in the hospital

The study doctors:

- did a physical exam and asked about the participants' medical problems
- checked the participants' heart health using an ECG, and using an echocardiogram for some participants
- checked the participants' lung health using CT or X-ray scans for some participants
- took blood and urine samples

The participants:

- took study treatment

10 days

After the participants got study treatment

1 visit from the study doctors each day while the participants were in the hospital, and then up to 5 phone calls or visits by the participants to a study site

The study doctors:

- did a physical exam and asked about the participants' medical problems at some visits
- took blood and urine samples at some visits
- checked the participants' heart health using an ECG or an echocardiogram for some participants while they were in the hospital
- checked the participants' lung health using CT or X-ray scans for some participants while they were in the hospital

The participants:

- took BSC while they were in the hospital

Up to about 12 weeks

What were the results of this study?

This is a summary of the main results from this study overall. The results each participant had might be different and are not in this summary. A full list of the questions that researchers wanted to answer can be found on the websites listed at the end of this summary. When a full report of the study results is available, it can also be found on these websites.

Researchers look at the results of many studies to decide which treatments work best and are safest. Other studies may provide new information or different results. Always talk to a doctor before making any treatment changes.

Did acalabrutinib help the participants stay alive and breathe without help?

No. Overall, the researchers found that acalabrutinib did not help the participants stay alive and breathe without help.

To answer this question, the researchers counted the number of participants who were alive and could breathe without help 2 weeks after the study started. They did this for each treatment group. The researchers calculated these numbers as a percentage. Then, they compared the results in the group who took acalabrutinib and BSC to the results in the group who took BSC only.

The researchers found that after 2 weeks of treatment, the percentage of participants who stayed alive and could breathe without help was similar between the 2 groups.

The percentage of participants who were alive and could breathe without help after 2 weeks of treatment was:

- 83.1% of those who were planned to take acalabrutinib and BSC. This was 74 out of 89 participants.
- 90.9% of those who were planned to take BSC only. This was 80 out of 88 participants.

What medical problems did the participants have during this study?

This section is a summary of the medical problems the participants had during the study that the study doctors thought might be related to acalabrutinib. These medical problems are called "adverse reactions". An adverse reaction is considered "serious" when it is life-threatening, causes lasting problems, or requires hospital care.

These adverse reactions may or may not be caused by acalabrutinib. A lot of research is needed to know whether a drug causes an adverse reaction. These adverse reactions have been, and will continue to be, reviewed together with all of the available data for acalabrutinib.

The websites listed at the end of this summary may have other information about adverse reactions or other medical problems that happened during this study.

This summary does not include adverse reactions for the participants who took BSC only. There were 3 participants who were planned to take acalabrutinib and BSC, but these participants did not take any acalabrutinib. So, the results below are only for the 86 participants who took acalabrutinib and BSC.

Did any adverse reactions happen during this study?

There were 15.1% of participants who took acalabrutinib and BSC who had adverse reactions. This was 13 out of 86 participants.

There were 3.5% of participants who took acalabrutinib and BSC who stopped taking study treatment due to adverse reactions. This was 3 out of 86 participants.

What serious adverse reactions happened during this study?

There were 2.3% of participants who took acalabrutinib and BSC who had 1 serious adverse reaction each. This was 2 out of 86 participants. These serious adverse reactions were pneumonia and an infection in the moist inner lining of a body cavity such as the nose, mouth, lungs, or stomach.

There were 1.2% of participants who died due to a serious adverse reaction. This was 1 out of 86 participants. This serious adverse reaction was pneumonia.

What adverse reactions happened during this study?

The most common adverse reaction was a headache. This adverse reaction happened in 2.3% of the participants who took acalabrutinib and BSC. This was 2 out of 86 participants. There were other adverse reactions, but these happened in 1 participant each.

How has this study helped patients and researchers?

This study helped researchers learn more about how acalabrutinib works and about its safety in participants with COVID-19 who need hospital care.

Researchers look at the results of many studies to decide which treatments work best and are safest. This summary shows only the main results from this one study. Other studies may provide new information or different results.

Further clinical studies with acalabrutinib in the treatment of COVID-19 are not planned.

Where can I learn more about this study?

You can find more information about this study on the websites listed below. When a full report of the study results is available, it can also be found here.

- www.clinicaltrials.gov. Once you are on the website, type **"NCT04346199"** into the search box and click **"Search"**.
- http://www.clinicaltrialsregister.eu. Once you are on the website, click **"Home and Search",** then type **"2020-001644-25"** in the search box and click **"Search"**.
- www.AstraZenecaClinicalTrials.com. Once you are on the website, type **"D822FC00001"** into the search box, and click **"Find a Study"**.

Full Study Title: A Phase 2, Open Label, Randomized Study of the Efficacy and Safety of Acalabrutinib with Best Supportive Care Versus Best Supportive Care in Subjects Hospitalized with COVID-19

Acerta Pharma B.V. Protocol Number: D822FC00001

National Clinical Trials Number: NCT04346199

EudraCT Number: 2020-001644-25

Acerta Pharma B.V. sponsored this study and has its headquarters at Oss, The Netherlands.

The phone number for the AstraZeneca Information Center is +1-877-240-9479.

Thank you

Clinical study participants belong to a large community of people who take part in clinical research around the world. They help researchers answer important health questions and find medical treatments for patients.

CISCRP

The Center for Information & Study on Clinical Research Participation (CISCRP) is a non-profit organization focused on educating and informing the public about clinical research participation. CISCRP is not involved in recruiting participants for clinical studies, nor is it involved in conducting clinical studies.

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