AstraZeneca

Clinical Study Results

Research Sponsor: AstraZeneca AB

Treatment Studied: Acalabrutinib with rabeprazole

Study Purpose: This study was done to learn more about how acalabrutinib acts in the blood in healthy participants when taken with flat Coca-Cola and the proton-pump inhibitor rabeprazole

Protocol Number: D822FC00008

Thank you!

Thank you to the participants who took part in the clinical study for the study drug acalabrutinib taken with rabeprazole. AstraZeneca AB sponsored this study and believes it is important to share the results. An independent non-profit organization called CISCRP helped prepare this summary of the study results.

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

Who took part in this study?

The researchers asked for the help of healthy men and women. The participants in this study were 24 to 55 years old when they joined.

The study included 37 participants in the United States.

Why was the research needed?

Researchers are looking for a better way to treat the coronavirus disease, also called COVID-19. Before a drug can be approved for people to take, researchers do clinical studies to find out how safe it is and how it works.

COVID-19 can cause swelling in the lungs and airways. This can lead to lung damage, difficulty breathing, and other medical problems. If a patient with COVID-19 has severe swelling, they may need a breathing tube and 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. The results from these animal studies suggested that acalabrutinib might be able to decrease swelling in the lungs and airways in patients who have COVID-19.

Patients with COVID-19 who are breathing with a ventilator may have increased stomach acid, so they are often given medications called proton-pump inhibitors to prevent stomach ulcers. Proton-pump inhibitors reduce the amount of acid the stomach makes. One of these proton-pump inhibitors is rabeprazole. Earlier studies in healthy volunteers have shown that when there is less stomach acid, it is harder for acalabrutinib to get into the blood. Drinking flat Coca-Cola adds some acid to the stomach and may help acalabrutinib get into the blood.

In this study, the researchers wanted to learn more about how acalabrutinib and its metabolite act in the blood in healthy participants when taken with rabeprazole and flat Coca-Cola. A metabolite is a substance that the body makes when it breaks down a drug. The body then removes metabolites through fluids such as urine and sweat.

What was the purpose of this study?

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

- Did flat Coca-Cola and rabeprazole affect how much acalabrutinib and its metabolite got into the blood?
- What medical problems happened during the study?

The researchers wanted to learn the answers to these questions before doing other studies to find out if acalabrutinib could help improve the health of people who have COVID-19.

When this study ended, there was information available from other studies in patients with COVID-19. This information showed that acalabrutinib did not help those patients. So, the researchers are not planning to do more acalabrutinib studies in people with COVID-19.

What treatments did the participants take?

In this study, the participants took either:

- acalabrutinib as a capsule by mouth with water
- rabeprazole as a tablet and acalabrutinib as a capsule by mouth with flat Coca-Cola

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.

There were 2 groups in this study. The chart below shows the treatments the researchers planned to study.

	Group 1	Group 2
	18 participants	19 participants
	• acalabrutinib as a capsule by mouth with water	• rabeprazole as a tablet by mouth • acalabrutinib as a capsule by mouth with flat Coca-Cola
	• acalabrutinib and water 1 time	• rabeprazole twice each day for 3 days, and then once on the day the participants took acalabrutinib • acalabrutinib and flat Coca-Cola 1 time

What happened during this study?

The study started in July 2020 and ended in August 2020.

Before the participants took study treatment, they visited their study site 1 time. This part of the study lasted for up to 4 weeks. At this visit, the study doctors made sure the participants could join the study. They also:

- did a physical exam and asked about the participants' medications and any medical problems they were having
- did a test for COVID-19
- took blood and urine samples
- checked the participants' heart health using an electrocardiogram, also called an ECG

The study doctors also did these tests and measurements throughout the study.

While the participants took study treatment, the participants in Group 1:

- had 2 phone calls and 2 visits with the study doctors
- stayed overnight at their study site for 2 nights and took their study treatment there

The participants in Group 2:

- took rabeprazole at home for 2 days
- had 2 phone calls and 2 visits with the study doctors
- stayed overnight at their study site for 2 nights and took their final dose of rabeprazole and their only dose of acalabrutinib there
- kept a diary of taking rabeprazole

About 10 days after the participants took their last study treatment, they visited their study site 1 time. At this visit, the study doctors checked the health of the participants.

The COVID-19 pandemic did not affect the way the study was done, the results of the study, or the conclusions of the researchers.

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.

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.

There were 2 out of the 37 participants who did not take any study treatment. So, the results below are for 35 of the 37 participants.

The websites listed at the end of this summary may have a full report of the study results.

Did flat Coca-Cola and rabeprazole affect how much acalabrutinib and its metabolite got into the blood?

Yes. To answer this question, the study doctors measured:

- the average total amount of acalabrutinib and its metabolite in the blood during treatment
- the average highest amount of acalabrutinib and its metabolite in the blood during treatment

The researchers compared the results for the participants who took acalabrutinib with water and those who took rabeprazole and acalabrutinib with flat Coca-Cola. Overall, the researchers found that the average total and average highest amounts of acalabrutinib and its metabolite **were lower** in the participants who took rabeprazole and acalabrutinib with flat Coca-Cola.

What medical problems happened 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 the study treatments. 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.

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

Did any adverse reactions happen during this study?

None of the participants had adverse reactions during this study.

None of the participants left this study due to adverse reactions.

What serious adverse reactions happened during this study?

None of the participants had serious adverse reactions during this study.

None of the participants died due to serious adverse reactions during this study.

How has this study helped patients and researchers?

This study helped researchers learn more about how acalabrutinib acts in the blood in healthy participants when taken with flat Coca-Cola and the proton-pump inhibitor rabeprazole. This can be helpful to understand how acalabrutinib may act in patients with COVID-19.

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 for 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.

- www.clinicaltrials.gov Once you are on the website, type **"NCT04489797"** into the search box and click **"Search"**.
- www.AstraZenecaClinicalTrials.com Once you are on the website, type **"D822FC00008"** into the search box, and click **"Find a Study"**.

Full Study Title: A Phase I, Open-label, Randomized, Single-dose Study of Acalabrutinib in Healthy Subjects to Evaluate the Effect of Proton-pump Inhibitor (Rabeprazole) on Acalabrutinib Capsule when Administered Orally with COCA-COLA

AstraZeneca AB Protocol Number: D822FC00008

National Clinical Trials Number: NCT04489797

AstraZeneca AB sponsored this study and has its headquarters at Södertälje, Sweden.

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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