Clinical Study Results

AstraZeneca

Research Sponsor: AstraZeneca AB

Drugs Studied: RDEA3170, febuxostat, and dapagliflozin

Study Title: A study to learn how treatment with RDEA3170, febuxostat, and dapagliflozin works and how safe it is in people with high levels of uric acid in their blood.

Thank you!

Thank you for taking part in the clinical study for the study drugs RDEA3170, febuxostat, and dapagliflozin. You and all of the participants helped researchers learn more about using these study drugs together to help people with high levels of uric acid in their blood.

AstraZeneca AB sponsored this study and thinks 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 doctor or staff at your study site.

What is happening with the study now?

You and the other participants were in the study for up to about 10 weeks. The study started in October 2017 and ended in July 2018. The study included 36 participants in the United States.

The sponsor reviewed the data collected when the study ended and created a report of the results. This is a summary of that report.

Why was the research needed?

Researchers are looking for a better way to treat people who have high levels of uric acid in their blood. 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.

Uric acid is a waste product of the body and is found in urine and blood. High levels of uric acid in the blood can cause gout, which is a build up of uric acid that makes joints swollen and painful. High levels of uric acid in the blood have also been linked to medical problems with the heart and kidneys, and to high blood pressure, diabetes, and obesity. Lowering the level of uric acid in the blood may stop or slow down the development of these problems.

RDEA3170, febuxostat, and dapagliflozin are study drugs that lower the levels of uric acid in the blood. RDEA3170 works by increasing the amount of uric acid that leaves the body in the urine. Febuxostat works by decreasing the amount of uric acid that the body makes. It is not known exactly how dapagliflozin lowers the amount of uric acid in the blood.

In this study, the researchers wanted to find out if treatment with RDEA3170, febuxostat, and dapagliflozin works in a small number of participants who have high levels of uric acid in their blood. They also wanted to find out if the participants had any medical problems during the study.

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

- Did the study treatments change the amount of uric acid in blood and urine?
- What medical problems did the participants have during the study?

To answer the questions in this study, researchers asked for the help of men and women who had high levels of uric acid in their blood but had never had gout. The participants in this study were 20 to 63 years old.

What kind of study was this?

This was a “double-blind” study. This means none of the participants, doctors, or other study staff knew what treatment each participant took. Some studies are done this way because knowing what treatment the participants are taking can affect the results of the study. When the study ended, the research sponsor found out which treatment participants took so they could create a report of the study results.

This was also a “crossover” study. This means that each participant got both of the study treatments, but they took them in a different order. All the participants took tablets once a day for 7 days. The doses were measured in milligrams, also called mg.

The 2 study treatments were:

- 9 mg RDEA3170, 80 mg febuxostat, and 10 mg dapagliflozin
- 9 mg RDEA3170, 80 mg febuxostat, and a placebo

The placebo looked like dapagliflozin but did not have any medicine in it. Researchers use a placebo to help make sure any of the effects they see in participants who take a treatment are actually caused by the treatment. A computer program was used to randomly choose the order that participants took each treatment. 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.

What happened during the study?

Before treatment, the doctors checked the overall health of the participants to make sure that they could join the study. The doctors checked the heart health of the participants using an electrocardiogram, also known as an ECG, and took blood and urine samples.

During the study, there were 2 parts. In both parts, the participants took their assigned treatment. They also gave blood and urine samples at each study visit.

In Part 1, the participants:

- stayed overnight at the study center for the first 2 nights
- took study treatments at home for the next 5 days
- stayed overnight at the study center for the last 2 nights

The participants waited 1 to 3 weeks before returning to the study center for Part 2. This was done so that all of the study treatment from Part 1 could leave the participants’ bodies before they started Part 2.

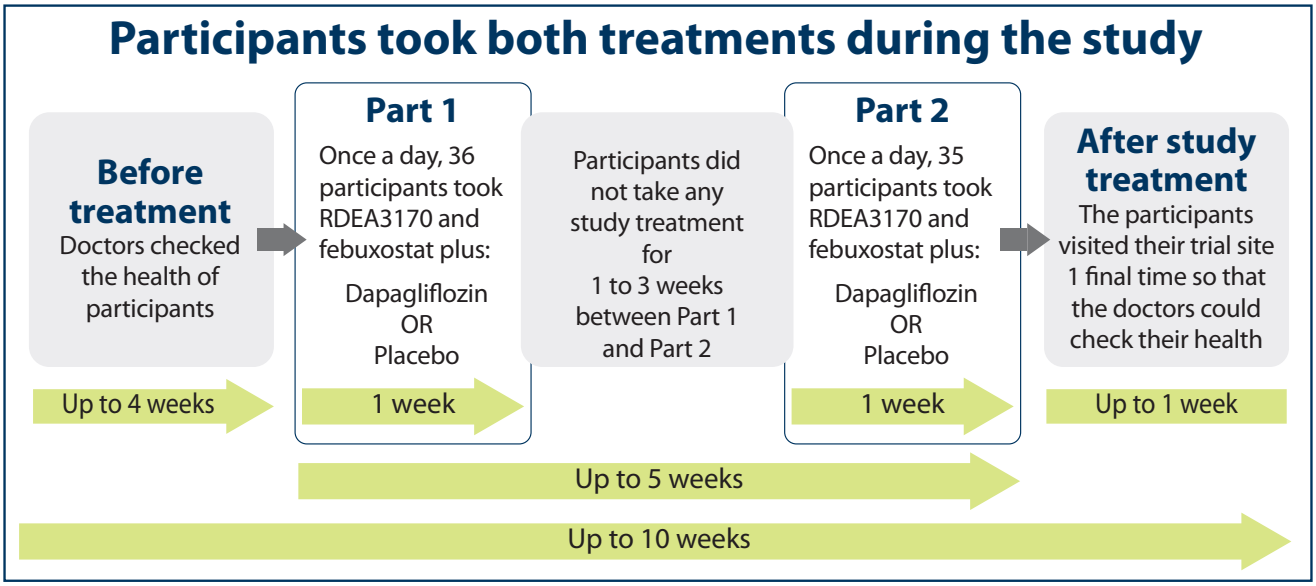
In Part 2, the participants:

- stayed overnight at the study center for the first 2 nights
- took study treatments at home for the next 5 days
- stayed overnight at the study center for the last 2 nights

After treatment, the participants visited the study center 1 more time. The doctors asked how they were feeling and took blood and urine samples.

There were 36 participants in this study, but only 35 participants completed the study.

The figure below shows how the study was done.



What were the results of the 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 the researchers wanted to answer can be found on the websites listed at the end of the summary. If a full report of the study results is available, it can also be found on these websites.

Researchers usually need 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 the study treatments change the amount of uric acid in blood and urine?

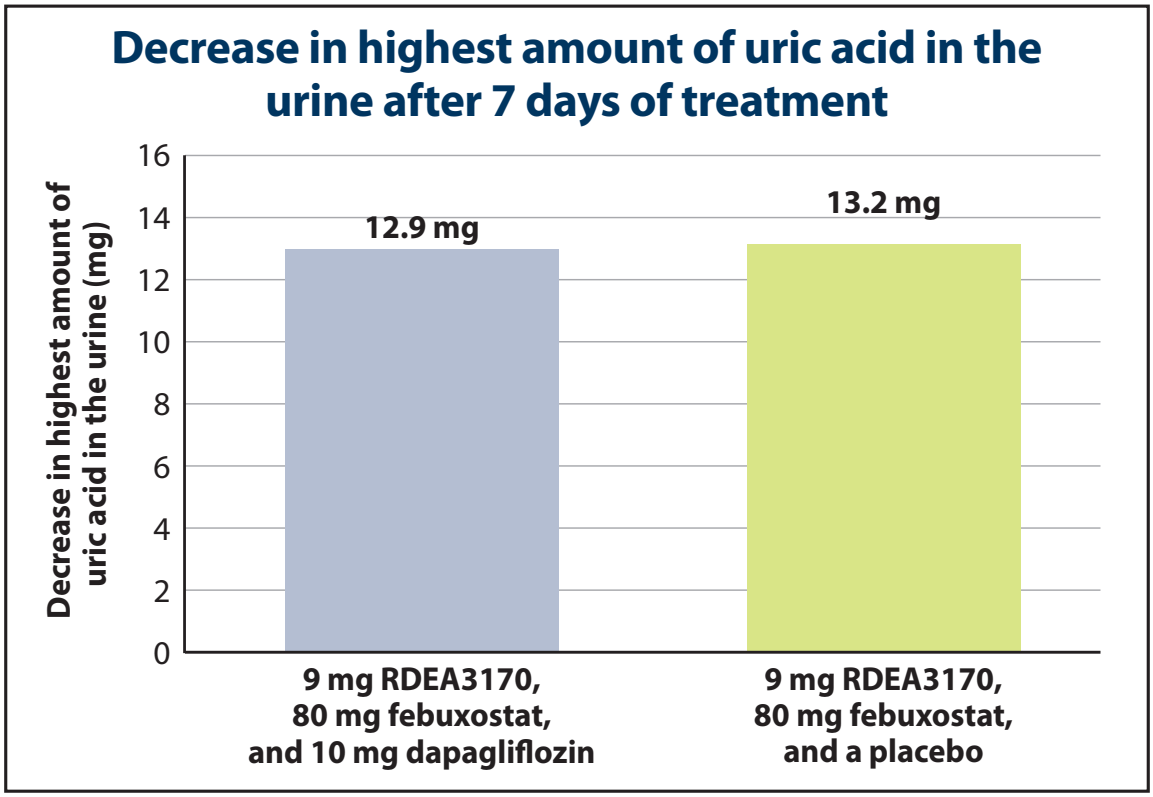
Overall, both of the treatments decreased the amount of uric acid in blood after 1 week. Because the amount of uric acid was so much lower in the blood, the amount of uric acid that left the body in urine was also lower after 1 week of treatment. However, the differences between the treatments were too small to know if taking RDEA3170, febuxostat, and dapagliflozin decreased the amount of uric acid in urine more than taking RDEA3170, febuxostat, and a placebo.

The researchers measured the change in the highest amount of uric acid in the participants' urine. This helps the researchers to know how much uric acid was in the participants' blood. They measured this before treatment and after treatment for 7 days. The researchers then compared the change in the amount of uric acid for each treatment. The amount of uric acid was measured in milligrams, also called mg.

After 7 days of treatment the participants had:

- 12.9 mg less uric acid in their urine while taking RDEA3170, febuxostat, and dapagliflozin
- 13.2 mg less uric acid in their urine while taking RDEA3170, febuxostat, and a placebo

The chart below shows these results.



What medical problems did the participants have during the 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 treatment. 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.

Usually the results from several trials are needed to decide if a treatment causes an adverse reaction. At the time of this study, it was not known if these adverse reactions were or were not caused by the study treatment.

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.

How many participants had serious adverse reactions?

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

How many participants had adverse reactions?

- 2.9% of participants had adverse reactions while they took RDEA3170, febuxostat, and dapagliflozin during the study. This was 1 out of 35 participants.
- 8.3% of participants had adverse reactions while they took RDEA3170, febuxostat, and a placebo during the study. This was 3 out of 36 participants.

None of the participants stopped taking study treatment because of adverse reactions they had during the study.

What adverse reactions did the participants have?

The only adverse reactions were diarrhea, passing gas, headache, and nausea. There was 1 participant who had more than 1 adverse reaction while taking RDEA3170, febuxostat, and a placebo.

The most common adverse reaction was diarrhea. In each part of the study there was 1 participant who had diarrhea.

The table below shows the most common adverse reactions that happened during this study. The researchers thought that these were related to the study treatment.

Most common adverse reactions during the study

	RDEA3170, febuxostat, and dapagliflozin (out of 35 participants)	RDEA3170, febuxostat, and a placebo (out of 36 participants)
Diarrhea	2.9% (1)	2.8% (1)
Passing gas	0.0% (0)	2.8% (1)
Headache	0.0% (0)	2.8% (1)
Nausea	0.0% (0)	2.8% (1)

How has this study helped patients and researchers?

This study helped researchers learn how treatment with RDEA3170, febuxostat, and dapagliflozin affects uric acid levels in people who have high levels of uric acid in their blood.

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 RDEA3170 are planned.

Where can I learn more about this study?

You can find more information about this study on the websites listed below. If 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 "**NCT03316131**" into the search box and click "**Search**".
- www.AstraZenecaClinicalTrials.com. Once you are on the website, type **"D5495C00001"** into the search box, and click **"Find a Study"**.

Full Trial Title: Quantifying Uric Acid Excretion with RDEA3170, Febuxostat and Dapagliflozin

National Clinical Trial number: NCT03316131

AstraZeneca Protocol Number: D5495C00001

AstraZeneca AB sponsored this study and has its headquarters in 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 participants.