

## **Clinical Study Results**

Research Sponsor: AstraZeneca

Treatment Studied: AZD4831

**Study Purpose:** This study was done to learn how AZD4831

works and about its safety in participants with

a type of heart failure called HFpEF

**Protocol Number:** D6580C00003

# Thank you!

Thank you for taking part in the clinical study for the study drug AZD4831.

You and all of the participants helped researchers learn more about AZD4831 to help people who have heart failure with preserved ejection fraction, also called HFpEF. In people with HFpEF, the heart can pump normally or nearly normally but becomes too stiff to fill properly. This means that blood collects in the lungs and in the rest of the body.

AstraZeneca 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



### Why was the research needed?

Researchers are looking for a better way to treat a type of heart failure called HFpEF. In this study, the researchers wanted to find out more about how AZD4831 works in people with HFpEF. They wanted to find out if AZD4831 reduced the activity in the blood of a protein called MPO, also known as myeloperoxidase, which is a marker of inflammation in the heart or blood vessels. Before a treatment can be approved for people to take, researchers do clinical studies to find out how it works and how safe it is.



### What treatments did the participants take?

The participants in this study took AZD4831 or a placebo. A placebo looks like a treatment but does not have any medicine in it.



### What were the results of the study?

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

Did AZD4831 reduce the activity of MPO in the blood?

The study was stopped early because of the COVID-19 pandemic. This meant the researchers did not have enough data to compare the results of the participants who took AZD4831 to the results of the participants who took the placebo.

What medical problems did the participants have during this study?

There were 9.8% of participants who had medical problems that the study doctors thought might be related to the study treatments during this study.

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 these websites.

# Who took part in this study?

The researchers asked for the help of men and women with a type of heart failure called HFpEF. The participants in this study were 54 to 85 years old when they joined.

People with other types of heart failure did not participate in this study. This study included 41 participants in Denmark, Finland, the Netherlands, Sweden, and the United States.



# Why was the research needed?

Researchers are looking for a better way to treat people with HFpEF. Before a treatment 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 AZD4831 works in a small number of participants with HFpEF. They also wanted to find out if the participants had any medical problems during the study.

HFpEF happens when the heart can pump normally or nearly normally but becomes too stiff to fill properly. This means that blood collects in the lungs and in the rest of the body.

Heart failure is a long-lasting condition that can cause symptoms such as shortness of breath, tiredness, and swelling of certain tissues. In serious cases of heart failure, there is an increased risk of other heart problems, and of death.

The study drug, AZD4831, was designed to reduce the activity of a protein called MPO. High amounts of MPO in the blood can be a sign of inflammation of the heart or the blood vessels. High amounts of MPO in the blood can be linked to an increased chance of having severe heart problems or problems with blood moving through the body. Researchers think reducing the activity of MPO in people with HFpEF may mean they have less risk of severe heart problems.



# What was the purpose of this study?

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

- ▶ Did AZD4831 reduce the activity of MPO in the blood?
- ▶ What medical problems did the participants have during the study?

The answers to these questions are important to know before other studies can be done to find out if AZD4831 helps improve the health of people with HFpEF.



# What treatments did the participants take?

In this study, the participants took AZD4831 or a placebo. A placebo looks like a treatment but does not have any medicine in it. Researchers use a placebo to help make sure any of the effects they see in the participants who take treatment are actually caused by the treatment.

This was a "double-blind" study. This means none of the participants, researchers, study doctors, or other study staff knew what treatment each participant was taking. Some studies are done this way because knowing what treatment the participants are taking can affect the results of the study.

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 AZD4831 or the placebo as a tablet by mouth, once a day for about 3 months.

When the study ended, the research sponsor found out which treatment the participants took so they could create a report of the study results.

The chart below shows the treatments the researchers studied.

| AZD4831                      | Placebo                      |
|------------------------------|------------------------------|
| 27 participants              | 14 participants              |
| AZD4831 as a tablet by mouth | Placebo as a tablet by mouth |
| AZD4831 once a day           | Placebo once a day           |



# What happened during this study?

Each participant was in the study for about 5 months. The entire study took about 1.5 years to finish.

The study started in December 2018 and ended in May 2020. The study was stopped early due to the COVID-19 pandemic.

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 physical exam and asked about the participants' medications and any medical problems



checked the participants' heart health using an electrocardiogram and by doing a special type of heart ultrasound exam



took blood and urine samples

#### The participants:

The participants:



answered questionnaires about their symptoms and quality of life

4 weeks



#### While the participants took study treatment

#### 6 visits

#### The study doctors:



did a physical exam and asked about the participants' medications and any medical problems



took their doses of AZD4831 or the placebo as tablets by mouth once a day at home



checked the participants' heart health using an electrocardiogram and by doing a special type of heart ultrasound exam at some visits



answered questionnaires about their symptoms



took blood and urine samples

Up to 3 months



#### After the participants took study treatment 1 visit

#### The study doctors:



asked about the participants' medications and any medical problems



took blood and urine samples



checked the participants' heart health using an electrocardiogram and by doing a special type of heart ultrasound exam at some visits

4 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 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 AZD4831 reduce the activity of MPO in the blood?

To answer this question, the study doctors took blood samples before and after the participants took study treatment. The researchers then analyzed the blood samples to find out if AZD4831 reduced the amount of MPO in the blood. This could tell them if the activity of MPO had reduced. The researchers had planned:

- ▶ to compare the activity of MPO in the blood after 30 days of taking study treatment to the activity of MPO in the blood at the start of the study.
- ▶ to compare the results from the participants who took AZD4831 with the results from the participants who took the placebo. This was done at the end of study treatment and included all the participants in the study.

This study was stopped early because of the COVID-19 pandemic. Because of this, there was not enough data for the researchers to answer the second question as they had originally planned.

However, the first question could be answered. They did this for 14 of the 27 participants who took AZD4831. Compared to the start of the study, the researchers found that the activity of MPO in the blood was reduced by 68.0% for these participants after 30 days of taking study treatment.

The researchers also found that the participants who took AZD4831 had a bigger reduction in the activity of MPO in the blood than the participants who took the placebo. But, because the study was stopped early, the researchers could not conclude that AZD4831 reduced the activity of MPO in the blood.



# 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.

These adverse reactions may or may not be caused by the study treatments. A lot of research is needed to know whether a treatment causes an adverse reaction. These adverse reactions have been, and will continue to be, reviewed together with all of the available data for AZD4831.

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.

### Did any adverse reactions happen during this study?

|  | AZD4831<br>(out of 27 participants) | Placebo<br>(out of 14 participants) |
|--|-------------------------------------|-------------------------------------|
| How many participants had adverse reactions?                                   | 11.1% (3)                           | 7.1% (1)                            |
| How many participants had serious adverse reactions?                           | 0.0% (0)                            | 0.0% (0)                            |
| How many participants stopped taking study treatment due to adverse reactions? | 3.7% (1)                            | 0.0% (0)                            |

### What serious adverse reactions happened during this study?

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

### What adverse reactions happened during this study?

There were 9.8% of participants who had adverse reactions during this study. This was 4 out of 41 participants. Some participants had more than 1 adverse reaction during the study.

The table below shows the adverse reactions that happened during the study.

#### Adverse reactions

| Adverse reaction                   | AZD4831<br>(out of 27 participants) | Placebo<br>(out of 14 participants) |
|------------------------------------|-------------------------------------|-------------------------------------|
| Diarrhea                           | 3.7% (1)                            | 0.0% (0)                            |
| Allergic skin reaction             | 3.7% (1)                            | 0.0% (0)                            |
| Fever                              | 3.7% (1)                            | 0.0% (0)                            |
| Itchiness                          | 3.7% (1)                            | 0.0% (0)                            |
| Pain in the mouth and throat       | 3.7% (1)                            | 0.0% (0)                            |
| Stiffness of the muscles or joints | 0.0% (0)                            | 7.1% (1)                            |
| Hospitalization                    | 0.0% (0)                            | 7.1% (1)                            |



## How has this study helped patients and researchers?

This study helped researchers learn more about how AZD4831 works in participants with HFpEF.

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 AZD4831 are 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 also can be found here.

- www.clinicaltrials.gov Once you are on the website, type "NCT03756285" into the search box and click "Search".
- http://www.clinicaltrialsregister.eu Once you are on the website, click "Home and Search", then type "2018-002895-42" in the search box and click "Search".
- www.AstraZenecaClinicalTrials.com Once you are on the website, type "D6580C00003" into the search box, and click "Find a Study".

**Full Study Title:** A Randomized, Double Blind, Placebo-controlled, Parallel Group, Multicentre, Phase 2a Study to Assess Target Engagement, Safety and Tolerability of AZD4831 in Patients with Heart Failure with Preserved Ejection Fraction (HFpEF)

AstraZeneca Protocol Number: D6580C00003

**National Clinical Trials Number: NCT03756285** 

**EudraCT Number: 2018-002895-42** 

AstraZeneca sponsored this study and has its headquarters at Cambridge, UK.

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.



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.

CISCRP | One Liberty Square, Suite 1100 • Boston, MA 02109 | 1-877-MED-HERO | www.ciscrp.org

Version 1.0 2021\_08\_27