Clinical Study Results

Research Sponsor: AstraZeneca AB

Drug Studied: AZD8871

Study Title: A study to learn if AZD8871 helps participants who have chronic obstructive pulmonary disease

Thank you!

Thank you to the participants who took part in the clinical study for the study drug AZD8871. All of the participants helped researchers learn more about AZD8871 to help people who have chronic obstructive pulmonary disease, also called COPD.

AstraZeneca AB sponsored this study and thinks it is important to share the results of the study with the participants and the public. An independent non-profit organization called CISCRP helped prepare this summary of the study results. We hope it helps the participants understand and feel proud of their 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?

The participants were in the study for up to about 7 months. But the entire study took about 10 months to finish.

The study started in October 2018 and ended in August 2019. It included 73 participants in Germany and the United Kingdom.

When the study ended, the sponsor reviewed the collected data 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 chronic obstructive pulmonary disease, also called COPD. Before a drug can be approved for patients to take, researchers do clinical studies to figure out how it works and how safe it is.

COPD is a long-term condition caused by damage and narrowing of the airways. This can lead to symptoms such as difficulty breathing, phlegm, and coughing.

There are several inhaled treatments that help people manage their COPD symptoms. But these treatments may not work for some people and may cause medical problems.

The study drug, AZD8871, is being developed as an inhaled treatment to help people who have COPD manage their symptoms.

In this study, the researchers wanted to compare AZD8871 to a COPD treatment called Anoro Ellipta and to a placebo. A placebo looks like a drug 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 the study drug are actually caused by the study drug.

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

- Did AZD8871 help the participants breathe more easily?
- Did AZD8871 help the participants manage their COPD symptoms?
- What medical problems did the participants have during the study?

To answer the questions in this study, the researchers asked for the help of men and women who have COPD. The participants in this study were 47 to 80 years old when they joined.

What kind of study was this?

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

In this study, all the participants took 3 inhaled treatments: AZD8871, Anoro Ellipta, and the placebo.

A computer program was used to randomly choose the order in which the 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 the participants took treatment, they visited their study site 3 times over the course of 2 to 4 weeks. At these visits, the study doctors checked to make sure the participants could join the study. The study doctors:

- did physical examinations
- took blood and urine samples
- checked the participants' heart health using an electrocardiogram, also called an ECG
- checked the participants' lung health and COPD symptoms
- asked the participants about their medical history, how they were feeling, and what medicines they were taking

After the first visit, the participants stopped taking certain COPD treatments they had been taking before the study. If the participants were taking a type of inhaled COPD treatment called corticosteroids, they continued taking this treatment throughout the study if the doctors thought they needed to.

During this time, the participants also started taking "run-in" medicine. Doctors give run-in medicine to study participants to ensure that the participants are taking the same medicine when study treatment starts. This helps to make sure that the study results are as accurate as possible.

The run-in medicine in this study was ipratropium. This is an inhaled treatment that helps people manage their COPD symptoms. The participants took ipratropium before starting study treatment, during the "washout periods", and at the end of the study. During a washout period, participants do not take any study treatment. This is done so that each study treatment can be "washed out" of the body before the participants take the next treatment.

If the participants' COPD got worse at any time during the study, they could take a "rescue medicine". Rescue medicine is a specific medicine chosen by study doctors that participants can take to help manage their disease without affecting the study results. The rescue medicine in this study was salbutamol.

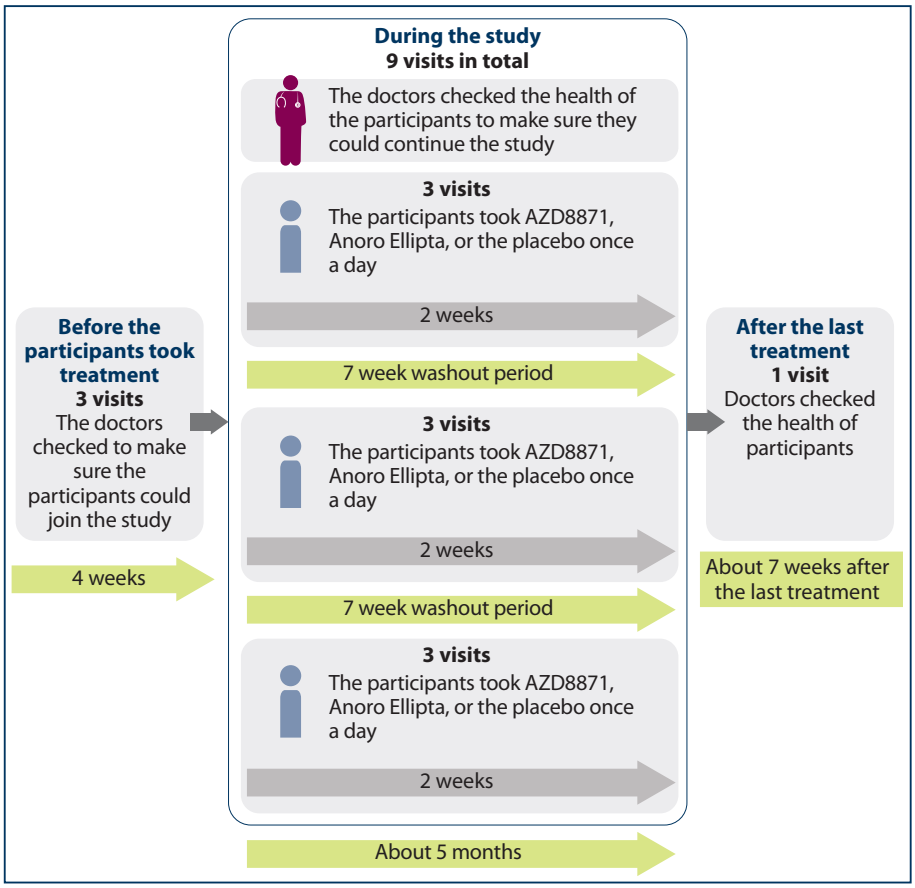
During the study, there were 3 treatment periods. Each treatment period lasted 2 weeks, and there was a washout period between each treatment period. The participants visited their study site 3 times during each treatment period, with a total of 9 visits over the course of about 5 months. They took each of the 3 study treatments during each treatment period, but in a different order.

Throughout the study, the study doctors:

- checked the participants' overall health and lung health
- gave the participants surveys that asked them about their COPD symptoms and how they were feeling

About 7 weeks after taking their last treatment, the participants visited their study site 1 time. At this visit, the study doctors checked the participants' overall health and lung health and asked them how they were feeling.

The chart 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 researchers wanted to answer can be found on the websites listed at the end of this summary. If 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 AZD8871 help the participants breathe more easily?

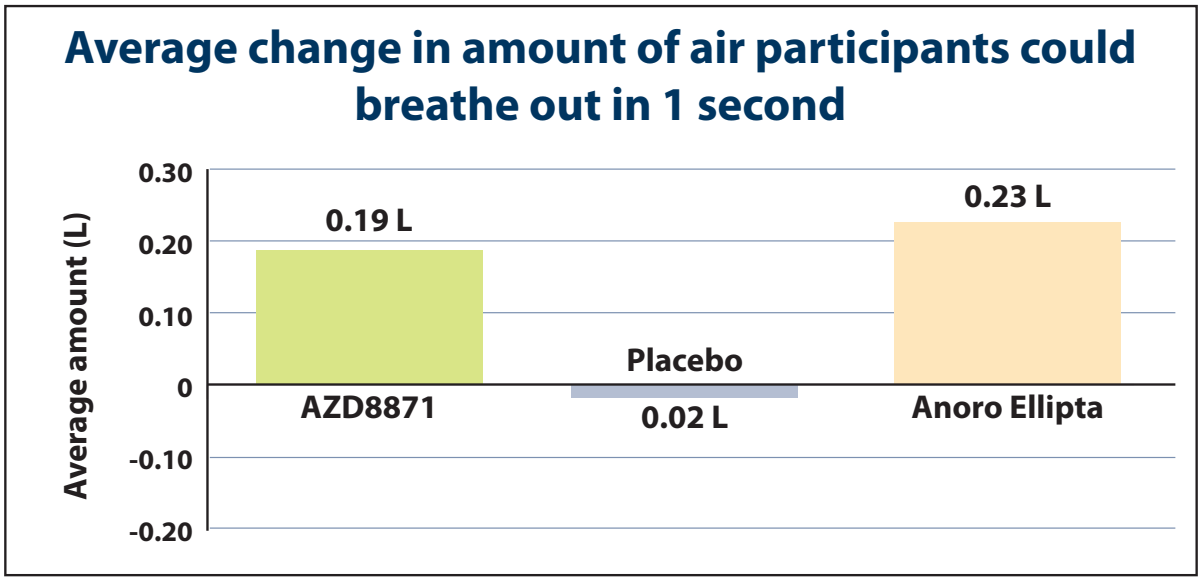
Overall, the researchers found that AZD8871 helped the participants breathe more easily compared to the placebo. The researchers found that there was a similar change in the participants' breathing when they took AZD8871 compared to when they took Anoro Ellipta. The difference between these 2 treatments was too small for the researchers to know if AZD8871 helped the participants' breathing compared to Anoro Ellipta.

To answer this question, the study doctors measured how much air the participants could breathe out in 1 second. The researchers compared the results of this measurement before and after each 2-week treatment period. The amount of air was measured in liters, also called L.

Overall, the researchers found that compared to before treatment:

- After taking AZD8871, the participants could breathe out an average of 0.19 L more air in 1 second.
- After taking the placebo, the participants could breathe out an average of 0.02 L less air in 1 second.
- After taking Anoro Ellipta, the participants could breathe out an average of 0.23 L more air in 1 second.

The figure below shows these results.



Did AZD8871 help the participants manage their COPD symptoms?

Overall, the researchers found that AZD8871 helped the participants better manage their COPD symptoms compared to the placebo. The researchers found that the participants' ability to manage their COPD symptoms was similar when they took AZD8871 compared to when they took Anoro Ellipta.

To answer this question, the study doctors kept track of the participants' coughing throughout the study and gave them surveys throughout the study that asked them to record and rate any COPD symptoms they had. These surveys were called:

- Breathlessness, Cough and Sputum Scale, also called BCSS
- COPD Assessment Test, also called CAT

These surveys asked about:

- difficulty breathing
- coughing
- a high amount of phlegm in the airways, nose, and throat
- tightness in the chest
- how active the participants felt
- if the participants' COPD affected how confident they felt leaving home
- difficulty sleeping
- low energy level

The researchers compared the survey results before and after the participants took study treatment.

Overall, the researchers found that the participants reported fewer and less severe COPD symptoms when they took AZD8871 compared to when they took the placebo. The researchers found that the change in COPD symptoms was similar when the participants took AZD8871 compared to when they took Anoro Ellipta. The difference between these 2 treatments was too small for the researchers to know if AZD8871 helped the participants better manage their COPD symptoms compared to Anoro Ellipta.

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 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.

Some of the participants left this study before taking all 3 treatments. So, the below results are for only some of the 73 participants.

The websites listed at the end of this summary may have other information about the 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.

None of the participants died during the study.

How many participants had adverse reactions?

There were 16.4% of participants who had adverse reactions during the study. This was 12 out of 73 participants. Some of the participants had more than 1 adverse reaction.

The table below shows how many participants had adverse reactions during the study.

Adverse reactions during the study			
	AZD8871 (out of 70 participants)	**Placebo (out of 68 participants**	**Anoro Ellipta (out of 69 participants)**
How many participants had adverse reactions during the study?	7.1% (5)	2.9% (2)	10.1% (7)
How many participants had serious adverse reactions during the study?	0.0% (0)	0.0% (0)	0.0% (0)
How many participants stopped treatment due to adverse reactions?	0.0% (0)	0.0% (0)	0.0% (0)

What adverse reactions did the participants have?

The most common adverse reaction during the study was headache.

The tables below show the adverse reactions that happened during the study.

Adverse reactions during the study			
	AZD8871 (out of 70 participants)	**Placebo (out of 68 participants**	**Anoro Ellipta (out of 69 participants)**
Headache	4.3% (3)	2.9% (2)	8.7% (6)
Cough	1.4% (1)	0.0% (0)	0.0% (0)
Irregular heart beat	1.4% (1)	0.0% (0)	0.0% (0)
Seasonal allergy	1.4% (1)	0.0% (0)	0.0% (0)
Diarrhea	0.0% (0)	0.0% (0)	1.4% (1)

How has this study helped patients and researchers?

This study helped researchers learn more about AZD8871 to help people who have COPD.

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 AZD8871 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 **"NCT03645434"** into the search box, and click **"Search"**.
- www.clinicaltrialsregister.eu. Once you are on the website, click **"Home and Search"**, then type **"2018-001722-25"** in the search box, and click **"Search"**.
- www.AstraZenecaClinicalTrials.com. Once you are on the website, type **"D6640C00006"** into the search box, and click **"Find a Study"**.

Full Trial Title: A Phase IIa, Randomised, Multi-centre, Double-blind, Placebo and Active-controlled, 3 Periods, Crossover Study to Investigate the Efficacy, Pharmacokinetics, Safety and Tolerability of Inhaled AZD8871 Administered Once Daily for 2 Weeks in Patients with Moderate to Severe COPD

AstraZeneca Protocol Number: D6640C00006

AstraZeneca AB sponsored this study and has its headquarters at 151 85 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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