Clinical Trial RESULTS

AstraZeneca

Research Sponsor: AstraZeneca AB
Drugs Studied: AZD7986
National Clinical Trial #: NCT02653872
Eudra CT #: 2015-002840-15
Protocol #: D6190C00003
Study Date: January 2016 to April 2016
Short Study Title: A study in healthy volunteers to investigate a new drug for the treatment of chronic obstructive pulmonary disease (COPD)

Thank you!

As a clinical study participant, you belong to a large community of participants around the world. You help researchers answer important health questions and discover new medical treatments.

Thank you for taking part in the clinical study for the drug AZD7986. This drug is currently being developed to treat chronic obstructive pulmonary disease, or COPD, which is a chronic inflammation of the lungs that causes blockage of the airways and makes it difficult to breathe. New and better drugs are needed in the treatment of this disease, which can be very serious in many patients. You and all of the other participants helped researchers learn how AZD7986 affects the body.

AstraZeneca AB, the sponsor of this study, thanks you for your help and thinks it is important for you to know the results of your study. An Independent non-profit organisation called CISCRP prepared this summary of the study results for you with the help of a medical writing organisation. We hope it helps you understand and feel proud of your important role in medical research. If you have questions about the results, please speak with the doctor or staff at your study site.

CISCRP
THE CENTER FOR INFORMATION & STUDY ON CLINICAL RESEARCH PARTICIPATION

What's happened since my study ended?

Your study started in January 2016 and ended in April 2016. It included 15 men at one study site in the United Kingdom. All of you were healthy and between the ages of 18 and 55. When the study ended, the sponsor reviewed the data and created a report of the results. This is a summary of that report.

Why was the research needed?

Before a new drug can be given to patients, the company developing the treatment must do research studies to show that it is safe and effective. The first step in studying a new drug in people is to test it in healthy people, or people without any serious health problems. The study drug, AZD7986, is currently being developed to treat COPD.

Researchers in your study tested AZD7986 in combination with two approved drugs, verapamil and itraconazole.

Verapamil is a medication used to treat high blood pressure, chest pain, and certain heart rhythm disorders. It works by relaxing the muscles of your heart and blood vessels. Itraconazole is a medication that fights infections caused by fungus, which can affect any part of the body including the lungs, mouth, throat, toenails, or fingernails.

In this study, researchers wanted to know how the body absorbs, breaks down, and removes AZD7986 when taken in combination with the two approved drugs. The main questions researchers asked in your study were:

- How did AZD7986 act in the body when taken by itself versus when taken with other drugs?
- What medical problems did participants have after they took AZD7986?

What kind of study was this?

This study was an "open label" study. This means that both the participants and the study staff knew what study drugs each participant took. All 15 participants were put into one group throughout the entire study.

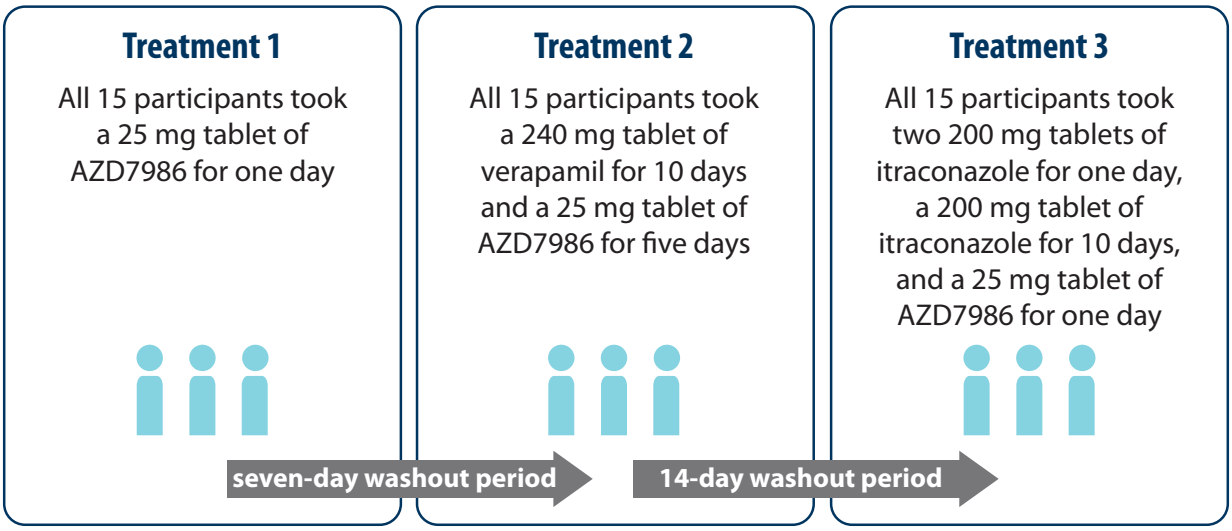
What happened during the study?

You and the other participants were in the study for almost three months. There were three treatments during the study, and all participants who completed the study took all three. In between the three treatments, there were "washout periods," during which you and the other participants did not receive the study drugs. Washout periods help get rid of the effect from the study drugs taken during the previous treatments.

This study had three treatments. All participants had all three treatments in the same order:

- **The first treatment lasted one day.** During this treatment, you and the other participants were given 25 milligrams, or mg, of AZD7986 in liquid form through the mouth.
- **The second treatment lasted 10 days.** On Day 1 through Day 10 of this treatment, you and the other participants were given a 240 mg tablet of verapamil once daily before food. On Day 5, you were also given 25 mg of AZD7986 in liquid form through the mouth one hour before getting food.
- **The third treatment lasted 11 days.** On Day 1 of this treatment, you and the other participants were given 200 mg of itraconazole in liquid form through the mouth twice daily, 12 hours apart. On Day 2 through Day 11 of this treatment, you were again given 200 mg of itraconazole in liquid form through the mouth but only once daily. On Day 6 of this treatment, you were also given 25 mg of AZD7986 in liquid form through the mouth. Throughout the study, doctors checked your blood pressure, body temperature, and took blood samples. They also checked your heart using an electrocardiogramme, or ECG.

You and the other participants had a follow-up visit five to seven days after the third treatment ended.



What were the study results?

Below is a summary of the results of some of the questions the researchers asked during this study. It is important to know that researchers look at the results of many studies to decide which medicines work best and are safest for patients. Further clinical studies with AZD7986 are currently planned.

How did AZD7986 act in the body when taken by itself versus when taken with other drugs?

Researchers took blood samples to compare the effects of AZD7986 taken alone with the effects of AZD7986 taken with either verapamil or itraconazole. They looked primarily at two different things:

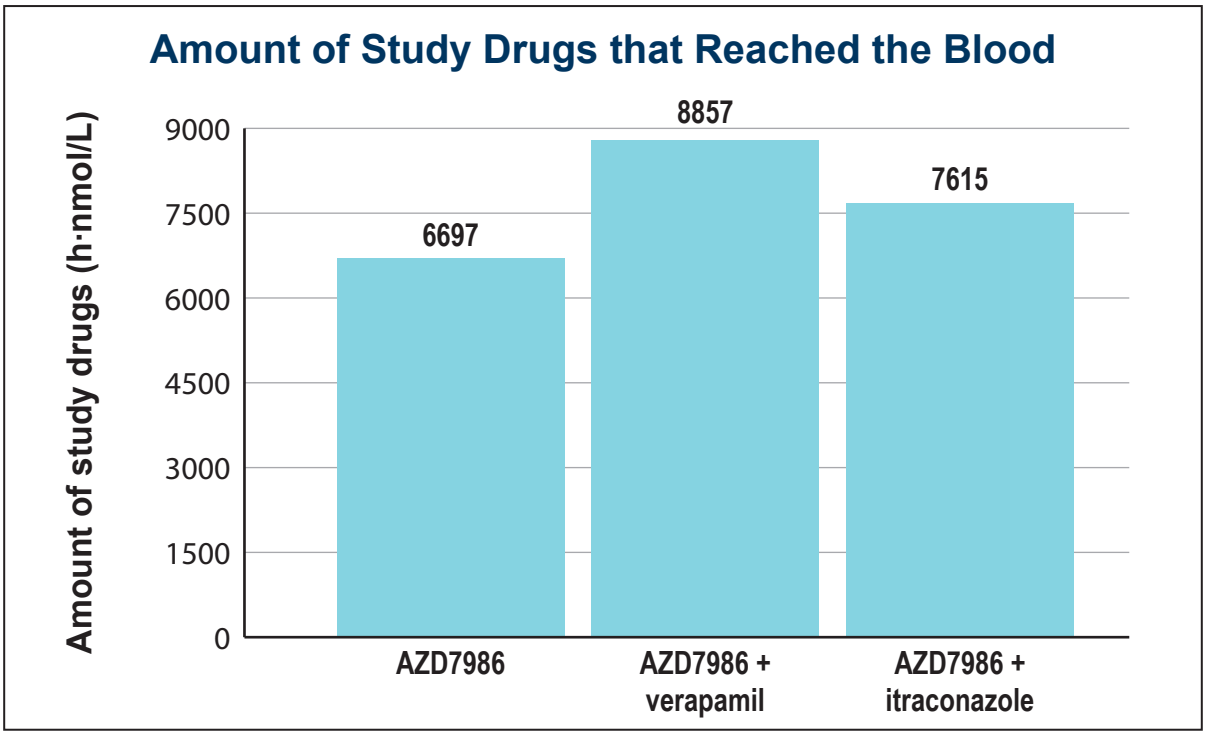
- the amount of the study drugs that reached the blood
- the highest amount of the study drugs in the blood over time

Amount of study drugs that reached the blood

Researchers measured the amount of study drugs that reached participants' blood using hour nanomoles per litre, or h·nmol/L. This is a scientifically accepted unit of measurement. They found that:

- participants who took only AZD7986 had an average of 6697 h·nmol/L of the drug in their blood
- participants who took AZD7986 with verapamil had an average of 8857 h·nmol/L of the drugs in their blood
- participants who took AZD7986 with itraconazole had an average of 7615 h·nmol/L of the drugs in their blood

The figure below shows these results.



Highest amount of study drugs in the blood over time

Researchers measured this using nanomoles per litre, or nmol/L. This is a scientifically accepted unit of measurement. They found that:

- participants who took only AZD7986 had an average highest amount of 385.8 nmol/L of the drug in their blood
- participants who took AZD7986 with verapamil had an average highest amount of 591.9 nmol/L of the drugs in their blood
- participants who took AZD7986 with itraconazole had an average highest amount of 234.1 nmol/L of the drugs in their blood

Generally, a higher amount of AZD7986 reached participants' blood when they took the study drug with either verapamil or itraconazole versus when they took the study drug by itself.

What medical problems did participants have?

A lot of research is needed to know whether a drug causes a medical problem. So when new drugs are being studied, researchers keep track of all medical problems that participants have during the study. These medical problems are also called "adverse events". They may or may not be caused by the study drug.

How many participants had medical problems in this study?

A total of 11 participants (73.3%) in the study had medical problems. Researchers looked at the medical problems participants had after they took each drug in the three treatments. The table below shows how many participants in each treatment group developed medical problems. No participants stopped taking the study drugs because of medical problems.

How Many Participants Developed Medical Problems?

	AZD7986 (15 participants)	Verapamil (15 participants)	AZD7986 + Verapamil (15 participants)	Itraconazole (15 participants)	AZD7986 + Itraconazole (15 participants)
How many participants developed medical problems?	5 participants (33.3%)	3 participants (20.0%)	7 participants (46.7%)	6 participants (40.0%)	5 participants (33.3%)

How many participants developed serious medical problems?

A medical problem is considered serious when it is life-threatening, causes lasting problems, or requires hospital care. No participants developed serious medical problems in this study and no participants died. No safety concerns were raised during this study.

What were the most common medical problems in the study?

The table below shows the most common medical problems that happened to more than one participant in the study.

Most Common Medical Problems in the Study

Medical Problem	AZD7986 (15 participants)	Verapamil (15 participants)	AZD7986 + Verapamil (15 participants)	Itraconazole (15 participants)	AZD7986 + Itraconazole (15 participants)
Diarrhoea	0 participants (0.0%)	0 participants (0.0%)	0 participants (0.0%)	3 participants (20.0%)	0 participants (0.0%)
Headache	0 participants (0.0%)	1 participant (6.7%)	5 participants (33.3%)	0 participants (0.0%)	1 participant (6.7%)
Drowsiness	0 participants (0.0%)	0 participants (0.0%)	2 participants (13.3%)	0 participants (0.0%)	0 participants (0.0%)
Common cold	0 participants (0.0%)	0 participants (0.0%)	2 participants (13.3%)	1 participant (6.7%)	1 participant (6.7%)
Dry skin	2 participants (13.3%)	0 participants (0.0%)	3 participants (20.0%)	1 participant (6.7%)	1 participant (6.7%)

Where can I learn more about the study?

If you have questions about the results, please speak with the doctor or staff at your study site. You can find more information about your study online at www.clinicaltrials.gov/ct2/show/NCT02653872.

Official study title: An open-label, non-randomised, fixed sequence study assessing the pharmacokinetics of AZD7986 when administered alone and with multiple doses of verapamil and itraconazole or diltiazem in healthy subjects

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

The results presented here are for a single study. Other studies may provide new information or different results. You should not make changes to your therapy based on the results of a single study without first consulting your healthcare professional.

Thank you

It is said that the greatest gift is one which is given anonymously, giving when you do not know whether you will get direct personal benefit.

This is the gift that you have given by taking part in a clinical trial. It is a brave and selfless act, one that advances medical knowledge and benefits public health.

Thank you for the gift of your participation in clinical research.

CISCRP
THE CENTER FOR INFORMATION & STUDY ON CLINICAL RESEARCH PARTICIPATION

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

CISCRP
One Liberty Square, Suite 510
Boston, MA 02109

1-877-MED-HERO
www.ciscrp.org