AstraZeneca

Clinical Study Results

Research Sponsor: AstraZeneca AB

Drug Studied: Osimertinib

Study Purpose: This study was done to learn how well osimertinib works in participants with advanced non-small cell lung cancer

Protocol Number: D5160C00022

Thank you

Thank you for taking part in the clinical study for the study drug osimertinib, also called AZD9291.

You and all of the participants helped researchers learn more about osimertinib to help people with a type of lung cancer called advanced non-small cell lung cancer, also called "advanced NSCLC".

AstraZeneca AB 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 of this study

Why was the research needed?

Researchers are looking for a better way to treat advanced NSCLC. Researchers already did studies that showed that osimertinib worked for people with advanced NSCLC. In this study the researchers wanted to find out more about the safety of osimertinib and how well it worked after it had been approved in some countries to be used as a treatment.

What treatments did the participants take?

All of the participants in this study took osimertinib.

What were the results of this study?

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

- **How long did the participants live after taking osimertinib?**

  The researchers found that the participants lived for an average of 22.8 months after taking osimertinib.

- **What medical problems did the participants have during this study?**

  There were 3.0% of participants who had medical problems that the study doctors thought might be related to the study drug during the study. The most common medical problem was having a longer time between heart beats.

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 those websites.

Who took part in this study?

The researchers asked for the help of men and women with advanced NSCLC. The participants in this study were 27 to 92 years old when they joined.

All of the participants had a specific change in a gene called "EGFR T790M positive" in their tumors. This is also called a "mutation". All of the participants had also previously tried a type of treatment called an "EGFR tyrosine kinase inhibitor", but their cancer had gotten worse.

The study included 3,017 participants in Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Denmark, Ireland, Italy, the Republic of Korea, Saudi Arabia, Spain, Sweden, Taiwan, and the United Kingdom.

Why was the research needed?

Researchers are looking for a better way to treat people with advanced NSCLC.

NSCLC is a type of lung cancer. In people with cancer, the body is not able to control the growth of some cells. The extra cells can form tumors. "Advanced" usually means that the cancer has spread to other parts of the body or has grown beyond the organ where it started. This is also known as "metastatic".

The study drug, osimertinib, was designed to stop different proteins in the body from allowing the tumors to grow. Osimertinib is already available as a treatment for people with certain types of NSCLC.

Researchers already did studies that showed osimertinib worked for the people with certain types of NSCLC who were in those studies. In this study, the researchers wanted to find out more about the safety of osimertinib and how well it worked.

What was the purpose of this study?

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

- How long did the participants live after taking osimertinib?
- What medical problems did the participants have during the study?

What treatments did the participants take?

In this study, all of the participants took osimertinib as a tablet by mouth once a day. The standard dose of osimertinib was 80 milligrams, also known as "mg", but the participants could take a lower dose if the study doctors thought they needed to. The participants continued to take osimertinib for as long as the study doctors thought it was helping them or until they left the study.

This was an "open-label" study. This means the participants, researchers, study doctors, and other study staff knew what each participant was taking.

	3,017 participants
	80 mg of osimertinib as a tablet by mouth
	Once a day for as long as the study doctor thought it was helping the participants or until they left the study

What happened during this study?

The participants were in the study for as long as the study doctors thought the study drug was helping them or until they left the study. But, the entire study took nearly 4 years to finish.

The study started in September 2015 and ended in April 2019.

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 how well the participants were able to carry out their daily activities
- took blood and urine samples
- checked the participants' heart health using an electrocardiogram, also called an ECG
- checked the participants' eye health using a special microscope for looking in eyes
- checked that the participants had the "EGFR T790M positive" mutation in their tumors

Up to 4 weeks

While the participants took study treatment

Visits every 6 weeks

The study doctors:

- did a physical exam and asked about the participants' medications and any medical problems
- checked how well the participants were able to carry out their daily activities
- took blood and urine samples if needed
- checked the participants' heart health using an ECG if needed
- checked the participants' eye health using a special microscope for looking in eyes if needed

The participants:

- took osimertinib at home once a day

For as long as the study doctors thought osimertinib was helping the participants

After the participants took study treatment

Visits every 6 weeks

The study doctors:

- checked the participants' health and asked about their medications and any medical problems

Until the study ended

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 that 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.

There were 3 participants who did not take any study treatment. So, the results below are for the 3,014 participants who took at least 1 dose of study treatment.

How long did the participants live after taking osimertinib?

The researchers found that the participants lived for an average of 22.8 months after taking osimertinib.

To answer this question, the researchers counted the number of months that the participants lived after their first dose of osimertinib. Then, they calculated the average for all of the participants.

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 drug. 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.

Because osimertinib is already available for people with certain types of NSCLC, the researchers in this study did not require information on all adverse reactions to be collected. For the adverse reactions that were not serious, the researchers only wanted to learn if the participants had specific adverse reactions. In this summary, these are called "adverse reactions of special interest".

This section is a summary of these adverse reactions of special interest, as well as **any** serious adverse reactions that the study doctors thought might be related to the study drug.

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

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 adverse reactions of special interest?

- There were 3.0% of participants who had an adverse reaction of special interest. This was 89 out of 3,014 participants.

How many participants had **any** serious adverse reaction?

- There were 3.2% of participants who had any serious adverse reaction. This was 95 out of 3,014 participants.

How many participants stopped taking study treatment due to adverse reactions of special interest?

- There were 0.6% of participants who stopped taking treatment due to adverse reactions of special interest. This was 18 out of 3,014 participants.

What serious adverse reactions happened during this study?

The most common serious adverse reactions were pneumonia and scarring and inflammation in the lungs. The table below shows the serious adverse reactions that happened in 2 or more participants during the study. There were other serious adverse reactions during the study, but these happened in fewer participants.

Most common serious adverse reactions

Serious adverse reaction	Osimertinib (out of 3,014 participants)
Pneumonia	0.2% (7)
Scarring and inflammation in the lungs	0.2% (7)
Diarrhea	0.2% (6)
Inflammation in the lungs	0.2% (6)
Blood clot in the lungs	0.2% (5)
Stroke	0.2% (5)
Decreased appetite	0.1% (4)
Abnormal liver function	0.1% (3)
Having a longer time between heart beats	0.1% (3)
Liver injury caused by the drug	0.1% (3)
Low levels of blood cells called platelets that help form clots	0.1% (3)
Blood clot in a deep vein of the body	0.1% (2)
Breathlessness	0.1% (2)
General weakness	0.1% (2)
Low levels of sodium in the blood	0.1% (2)
Lung failure resulting in not enough oxygen in the blood	0.1% (2)
Increased levels of a liver protein called ALT	0.1% (2)
Reduced levels of blood cells called platelets that help form clots	0.1% (2)

There were 0.6% of participants who died because of serious adverse reactions. This was 19 out of 3,014 participants.

What adverse reactions of special interest happened during this study?

There were only 2 adverse reactions of special interest that the researchers collected information about. The table below shows the adverse reactions of special interest that happened during the study.

Adverse reactions of special interest

Adverse reaction of special interest	Osimertinib (out of 3,014 participants)
Having a longer time between heart beats	2.1% (64)
Lung disease or an adverse reaction related to inflammation in the lungs	0.8% (25)

How has this study helped patients and researchers?

This study helped researchers learn more about osimertinib in participants with advanced NSCLC after it had been approved for use in some countries.

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 osimertinib 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 **"NCT02474355"** into the search box and click **"Search"**.
- http://www.clinicaltrialsregister.eu. Once you are on the website, click **"Home and Search",** then type **"2015-001407-31"** in the search box and click **"Search"**.
- www.AstraZenecaClinicalTrials.com. Once you are on the website, type **"D5160C00022"** into the search box, and click **"Find a Study"**.

Full Study Title: Open Label, Multinational, Multicenter, Real-World Treatment Study of Single Agent AZD9291 for Patients with Advanced/Metastatic Epidermal Growth Factor Receptor (EGFR) T790M Mutation-Positive Non-Small Cell Lung Cancer (NSCLC) Who Have Received Prior Therapy with an EGFR Tyrosine Kinase Inhibitor (EGFR-TKI)

AstraZeneca Protocol Number: D5160C00022

National Clinical Trials Number: NCT02474355

EudraCT Number: 2015-001407-31

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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