Summary of Clinical Trial Results

The study of a new medicine (RO7303359) in people with a type of eye disease (geographic atrophy secondary to age-related macular degeneration)

See the end of the summary for the full title of the study.

About this summary

This is a summary of the results of a clinical trial (called a "study" in this document).

This summary is written for:

- Members of the public
- People who took part in the study

This summary is based on information known at the time of writing.

The study started in December 2020 and finished in January 2023. This summary was written after the study had ended.

No single study can tell us everything about the risks and benefits of a medicine. It takes many people in several studies to find out everything we need to know. The results from this study may be different from other studies with the same medicine.

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Contents of the summary

Thank you to the people who took part in this study

The people who took part have helped researchers answer important questions about an eye disease (geographic atrophy secondary to age-related macular degeneration) and the medicine studied (RO7303359).

Key information about this study

- This study was done to find out how safe was it to give people a new medicine (RO7303359). The medicine was tested in people who had a type of eye disease: geographic atrophy (GA) secondary to age-related macular degeneration (AMD).
- Researchers wanted to learn about the side effects of RO7303359 in the eye and in the body. They wanted to find the highest dose that people could tolerate.
- Researchers also wanted to find out if there was any activity – whether RO7303359 was working.
- This study included 37 people at 13 study centers in the USA.
- The main finding was that nobody had any serious side effects that affected the eye or health in general. One person experienced a non-serious side effect in the study eye – thought to be caused by RO7303359. All the doses tested in this study were tolerable based on the side effects seen in this study.
- Researchers did not see any activity from RO7303359 in the eye. Based on this study, researchers decided to stop the development of RO7303359 for GA.

1. General information about this study

Why was this study done?

Age-related macular degeneration (AMD) causes irreversible loss of vision. The chances of getting AMD increase with age, starting at 50 years.

There are two forms of the advanced stage of AMD: dry AMD and wet AMD.

There are now two approved treatments for geographic atrophy (GA), the advanced stage of dry AMD. The disease causes cells in the back of the eye – in the retina and associated retinal pigment epithelium – to gradually degenerate and die. The new treatments do not restore vision that has already been lost, or completely stop disease progression. Therefore, it is important to find new medicines for this disease area.

Researchers have been studying a medicine that may be useful for GA secondary to AMD. This study was done to learn about the side effects of this medicine when given to people. It was the first time this study medicine was given to humans.

What was the study medicine?

This study was done to learn about "**RO7303359**." This study medicine is also called **anti-IL-33 Fab**.

RO7303359 works in the body by binding to a type of human protein (cytokine) called "interleukin-33" or "**IL-33**."

Several types of cells in the body produce IL-33, including cells in the back of the eye (retinal pigment epithelium).

When RO7303359 is bound to IL-33, IL-33 can no longer be active in the eye. Researchers believe blocking IL33 could be a strategy for the treatment of GA secondary to AMD.

What did researchers want to find out?

The main questions that researchers wanted to answer were:

1. What were the side effects in the eye and in the body from a single dose of RO7303359?
2. What was the highest dose of RO7303359 that people could tolerate?

Another question that researchers wanted to answer was:

3. Was there any evidence that RO7303359 was useful for GA secondary to AMD?

What kind of study was this?

Here are some features of this study.

Phase 1 study
This was a "Phase 1" study, which means that this was an early study looking at RO7303359. A small number of people with GA, secondary to AMD, got treatments. Researchers asked questions and did medical tests on the people to find out more about the treatments.

Single ascending dose (SAD) study
People who joined this study were assigned to a group. The first group of people received the lowest dose of the study medicine. Then, each new group received the next higher dose. The decision to increase the dose in the next group was made after reviewing safety results from people who had already been treated in the lower dose group.

Expansion study
Once researchers had tested different doses, they selected one or two higher doses to test further. To gather more data, the study was expanded and people joined the selected dose groups. With more people, there was a higher chance of seeing side effects. Having more people in the study also allowed researchers to further investigate if blocking IL33 could be a strategy for the treatment of GA.

Open-label study
Researchers and people in the study knew that people in the study were getting RO7303359. That made it an "open-label" study.

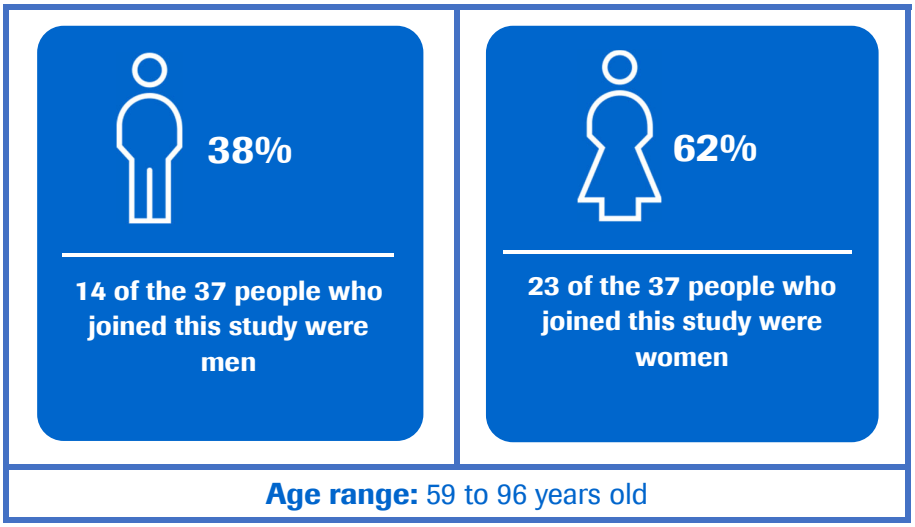
When and where did the study take place?

The study started in December 2020 and finished in January 2023. This summary was written after the study had ended.

The study took place at thirteen study centers – across one country – the USA.

2. Who took part in this study?

Thirty-seven people who had GA secondary to AMD took part in this study.



People could take part in the study if they met all of the following conditions:

- At least 50 years old
- Men who could get their partners pregnant and women who could get pregnant agreed to use birth control
- Men agreed not to donate sperm for a period
- People had eye disease that was confirmed by doctors to be GA secondary to AMD

People could not take part in the study if they met any one of the following conditions:

- Women who were pregnant, breastfeeding, or intended to become pregnant during a restricted period
- Did not meet the eye vision requirements or had a medical history that was not allowed
- Did not meet general health requirements according to medical test results, current health, or overall medical history

3. What happened during the study?

The study was divided into 3 parts:

- A screening period lasting up to 28 days
- A single day treatment period
- A follow-up period of 12 weeks

People joined one of four dose groups:

- Group 1 (lowest dose tested in this study)
- Group 2
- Group 3
- Group 4 (highest dose tested in this study)

Treatment was given as a single injection into the study eye. The other eye was the non-study eye.

People received treatment in the low dose group first. There was a 14-day observation period for side effects before the next higher dose group got their treatment.

People went on a follow-up visit to the clinic at 12 weeks after receiving the treatment.

Before, during, and after study treatment, the study staff asked questions and performed several procedures to learn about the study eye, the non-study eye, and the health of people in general. Study staff observed the study eye and non-study eye using specialized imaging equipment. People in the study were asked to give blood samples and samples from the eye (ocular fluid samples) at different time points.

4. What were the results of the study?

Thirty-seven people received the study treatment. Thirty-six (97%) people completed the study, including the follow-up visit at 12 weeks.

Question 1: What were the side effects in the eye and in the body from a single dose of RO7303359?

No one in this study had any serious side effects that affected the eye or general health. One person experienced a non-serious side effect in the eye, which was thought to be caused by RO7303359.

Question 2: What was the highest dose of RO7303359 that people could tolerate?

Four doses were tested in this study. None of the doses caused too many side effects. All four doses was thought to be tolerable.

An intolerable dose was not found – because dosing was not continuously increased beyond the tolerable doses – to the dose that became intolerable.

Question 3: Was there any evidence that RO7303359 was useful for GA secondary to AMD?

Researchers did not find any response to the treatment in the study eye in the different dose groups.

This section only shows the key results from this study. You can find information about all other results on the websites at the end of this summary (see section 8).

5. What were the side effects?

Side effects are medical problems (such as feeling dizzy) that happened during the study.

- They are described in this summary because the study doctor believes the side effects were related to the treatments in the study.
- Not all of the people in this study had all of the side effects.
- Side effects may be mild to very serious and can be different from person to person.
- It is important to be aware that the side effects reported here are from this single study. Therefore, the side effects shown here may be different from those seen in other studies, or those that appear on the medicine leaflet.
- If serious and common side effects were seen in this study, they will be listed in the following sections.

Serious side effects

A side effect is considered "serious" if it is life-threatening, needs hospital care, or causes lasting problems.

There were no serious side effects associated with the study eye, the non-study eye, or the general health of anyone in this study.

Most common side effects

One (3%) person in the study had a side effect that was not serious but thought to be related to the study treatment. It was in the study eye of a person in the group that received the highest dose of RO7303359.

No persons withdrew from the study because of any side effects related to the study treatment.

One person withdrew from the study because of a back injury that was not related to the study treatment.

Other side effects

You can find information about other side effects (not shown in the sections above) on the websites listed at the end of this summary – see section 8.

6. How has this study helped research?

The information presented here is from a single study of 37 people with GA secondary to AMD. These results helped researchers learn more about RO7303359, an experimental treatment. They found out that RO7303359 was tolerable at the doses tested in this study. They also found out that there was no activity in the eye in response to the treatment – at the doses tested in the study.

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7. Are there plans for other studies?

At the time of writing this summary, no more studies looking at RO7303359 are planned at the current time.

8. Where can I find more information?

You can find more information about this study on the websites listed below:

- https://clinicaltrials.gov/study/NCT04615325
- https://forpatients.roche.com/en/trials/eye-disorder/amd/a-study-to-evaluate-the-safety--tolerability--pharmacok-30793.html

Who can I contact if I have questions about this study?

If you have any further questions after reading this summary:

- Visit the ForPatients platform and fill out the contact form – https://forpatients.roche.com/en/About.html
- Contact a representative at your local Roche office.

If you took part in this study and have any questions about the results:

- Speak with the study doctor or staff at the study hospital or clinic.

If you have questions about your own treatment:

- Speak to the doctor in charge of your treatment.

Who organized and paid for this study?

This study was organized and paid for by Genentech, Inc., South San Francisco, CA, USA. Genentech is part of F. Hoffmann-La Roche Ltd., with headquarters in Basel, Switzerland.

Full title of the study and other identifying information

The full title of this study is:

A phase 1a, multicenter, open-label, single-dose, dose-escalation study of the safety, tolerability, pharmacokinetics, and immunogenicity of intravitreal injections of RO7303359 in patients with geographic atrophy secondary to age-related macular degeneration

- The protocol number for this study is GR42163.
- The ClinicalTrials.gov identifier for this study is NCT04615325.