NOVARTIS

Clinical Trial Results Summary

A clinical trial to learn about the effects and safety of secukinumab in participants with giant cell arteritis

Protocol number: CAIN457ADE11C

Thank You!

Novartis sponsored this trial and believes it is important to share what was learned from the results of this trial with the participants and the public. Thank you for taking part in this trial for the drug secukinumab, also known as AIN457. You helped researchers learn more about how secukinumab works in people with giant cell arteritis.

This summary only shows the results of a single clinical trial. Other clinical trials may have different findings. Researchers and health authorities, such as the Food and Drug Administration (FDA) in the United States and the European Medicines Agency (EMA) in Europe, look at the results of many clinical trials to understand which drugs work and if they are safe. Websites listed at the end of the summary may have more information about this trial. If you have any questions about these trial results, please talk to the doctor or staff at your trial site.

Why was the research needed?

Researchers were looking for a better way to treat giant cell arteritis (GCA). It is a condition that causes inflammation in the arteries. Arteries are vessels that carry blood from the heart to the rest of the body. GCA commonly affects the arteries in the head and neck region of the body. It causes headaches, jaw pain, tenderness in scalp, fever, tiredness, and vision problems. If left untreated, it can cause vision loss. The current therapy for GCA includes steroids which prevent inflammation in the body, but the effects are not long-lasting and can cause undesirable side effects.

Secukinumab (pronounced as *se-cu-KIN-umab*) is the drug studied in this trial and is already approved in many countries for the treatment of inflammatory diseases, such as plaque psoriasis and ankylosing spondylitis. Researchers wanted to find out if secukinumab could also be effective for treating patients with GCA.

Trial drugs

The drugs given in this trial were:

Secukinumab: It blocks the activity of a protein in the body called interleukin 17A, or IL-17A, which is involved in the body's response in GCA. Secukinumab 300 milligrams (mg) was given as an injection under the skin at different timepoints during the study.

Placebo: It looked like the trial drug but did not have any medicine in it. Using a placebo helps researchers better understand the effect of a trial drug by making sure that the changes were not happening by chance. Like secukinumab, it was given as an injection under the skin at different timepoints during the study.

During the trial, participants also took a steroid called **prednisolone**. It prevents the release of substances in the body that cause inflammation. Prednisolone was given by mouth, as a tablet, in gradually decreasing doses starting from 25-60 mg to 1 mg per day till Week 26 of the study.

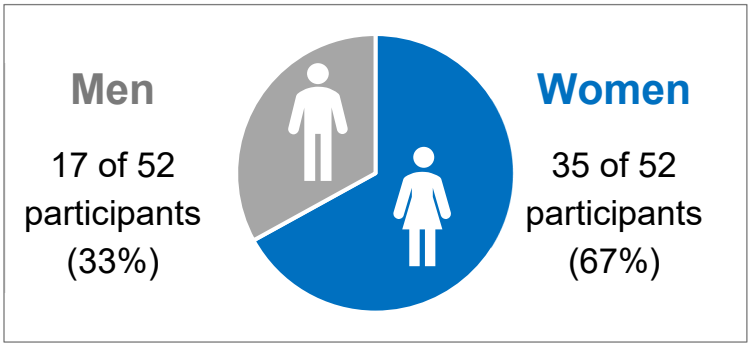
Who was in this trial?

The participants could take part in this trial if they:

- were at least 50 years of age,
- had signs and symptoms of GCA which was confirmed based on blood tests that check for inflammation in the body indicative of GCA,
- were on treatment with 25-60 mg of prednisolone per day at the start of the trial, and
- had not been previously treated with secukinumab or similar agents.

A total of 52 participants from Germany participated in this trial. All the participants were White.

The average age of participants was 73 years. Participants' age ranged from 50 to over 85 years.



How was this trial done?

The chart on the next page shows what happened during the trial.

Before treatment

- Participants switched from taking their current treatment to taking prednisolone.
- The researchers randomly assigned participants into 1 of the following 2 groups:

  Group 1: Secukinumab 300 mg as an injection under the skin
  Group 2: Placebo as an injection under the skin

  Each participant had an equal chance of ending up in either group.
- None of the participants, trial doctors, or trial staff knew what treatment the participants were receiving.

Up to 6 weeks

During treatment

- Participants received the assigned treatment once at the start of the trial, once every week till Week 4, and then once every 4 weeks till Week 48, which was the last dose. Participants were seen 4 weeks later at Week 52 to measure the effectiveness of the treatment.
- Participants also took prednisolone in gradually decreasing doses (taper regimen), starting from 25-60 mg and decreasing down to 1 mg till Week 26 and none after that.
- Researchers checked the severity of the disease and the participants' condition at every visit to determine if participants could follow the prednisolone taper regimen or if they needed any adjustments.

Up to 52 weeks

After treatment

- Participants visited their trial site for an overall health check-up at Week 56 and Week 60.

Up to 8 weeks after their last dose

What were the main results of this trial?

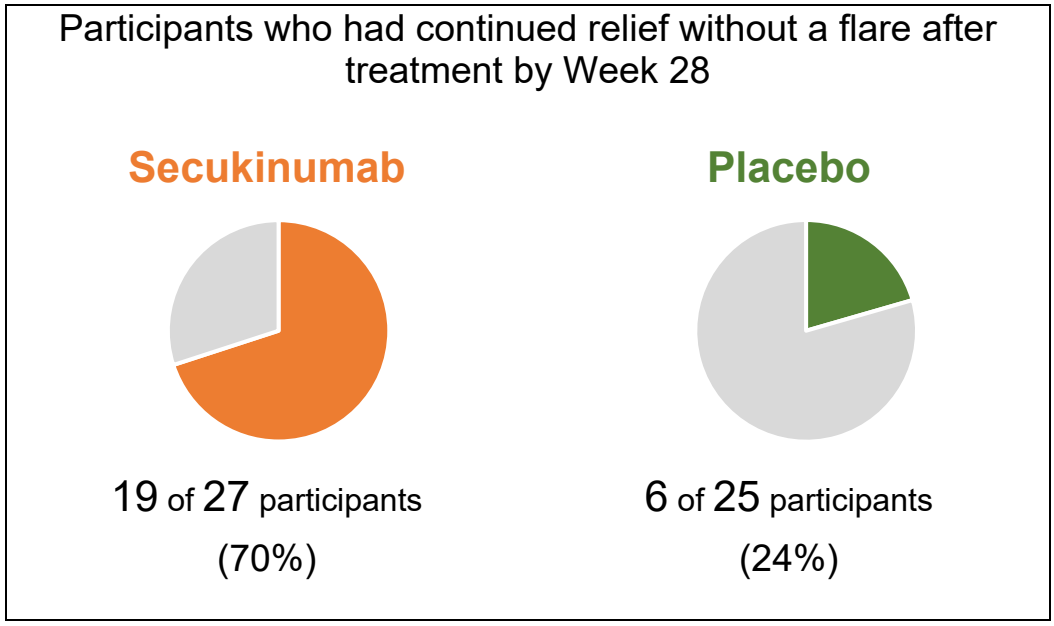
How many participants who took secukinumab had continued relief without a flare* by Week 28 compared to placebo?

At Week 28, more participants in the secukinumab group had continued relief without a flare compared to the placebo group. These included only those participants who were able to follow the prednisolone taper regimen and who did not need to take prednisolone beyond Week 26.

*** Flare** means

- recurrence of signs or symptoms of GCA after they were resolved, and/or
- increase in the rate of inflammation based on a blood test, and/or
- increase in levels of a protein in the blood that is an indicator of inflammation.

Participants who had continued relief without a flare after treatment by Week 28



What were the other results of this trial?

How many participants who took secukinumab had not experienced a flare until Week 12 compared to placebo?

22 out of 27 participants (82%) in the secukinumab group and 12 out of 25 participants (48%) in the placebo group had not experienced a flare until Week 12.

How many participants who took secukinumab had continued relief without a flare at Week 52 compared to placebo?

16 out of 27 participants (59%) in the secukinumab group and 2 out of 25 participants (8%) in the placebo group had continued relief without a flare until Week 52. These included only those participants who were able to follow the prednisolone taper regimen and who did not need to take it beyond Week 26.

Did the participants who took secukinumab experience an improvement in their overall health and quality of life during the trial compared to placebo?

To answer this question, participants and their trial doctor filled in questionnaires related to their condition and quality of life. The questionnaires showed that participants in the secukinumab group generally had better quality of life and overall health than those in the placebo group.

What medical problems did the participants have during the trial?

Medical problems that happen in clinical trials are called “adverse events”.

A lot of research is needed to know whether a drug causes an adverse event. During a trial, all adverse events are recorded, whether or not they are thought to be caused by the trial drug. When new drugs are being studied, researchers keep track of all adverse events participants have.

This section is a summary of the adverse events that happened during this trial. The websites listed at the end of this summary may have more information about all the adverse events that happened in this trial.

An adverse event is an unwanted sign, symptom, or disease that participants have during a trial.

An adverse event is considered “serious” when it is life-threatening, causes lasting problems, or the participant needs hospital care. These problems may or may not be caused by the trial drug.

How many participants had adverse events?

Number of Participants (%) With Adverse Events

	Secukinumab (Out of 27 participants)	Placebo (Out of 25 participants)	Total Participants (Out of 52 participants)
At least 1 adverse event	27 (100%)	24 (96%)	51 (98%)
At least 1 serious adverse event	6 (22%)	11 (44%)	17 (33%)
Stopped drug due to adverse event	2 (7%)	2 (8%)	4 (8%)
Death	1 (4%)	1 (4%)	2 (4%)

What were the most common non-serious adverse events?

The most common non-serious adverse events that happened in at least 12% of participants in any group are presented on the next page.

Number of Participants (%) With Most Common Non-Serious Adverse Events

	Secukinumab (Out of 27 participants)	Placebo (Out of 25 participants)
High blood pressure (Hypertension)	6 (22%)	8 (32%)
Common cold (Nasopharyngitis)	5 (19%)	5 (20%)
Headache (Headache)	4 (15%)	3 (12%)
Infection in any part of the urinary system (Urinary tract infection)	4 (15%)	2 (8%)
Yeast infection of the mouth and throat (Oral candidiasis)	4 (15%)	1 (4%)
Muscle cramps (Muscle spasms)	4 (15%)	1 (4%)

	Secukinumab (Out of 27 participants)	Placebo (Out of 25 participants)
Joint pain (Arthralgia)	3 (11%)	3 (12%)
Swelling in lower legs or hands (Oedema peripheral)	2 (7%)	4 (16%)
Collection of blood in the body caused by a broken blood vessel (Haematoma)	1 (4%)	3 (12%)
Back pain (Back pain)	0 (0%)	3 (20%)

What were the most common serious adverse events?

The most common serious adverse events that happened in at least any 2 participants out of 52 participants in total are shown below.

Number of Participants (%) With Most Common Serious Adverse Events

	Secukinumab (Out of 27 participants)	Placebo (Out of 25 participants)
Heart failure (Cardiac failure)	1 (4%)	1 (4%)
Fall (Fall)	1 (4%)	1 (4%)
Broken pelvis (Pelvic fracture)	1 (4%)	1 (4%)
Narrowing of spaces within the spine that puts pressure on the spinal nerves (Spinal stenosis)	1 (4%)	1 (4%)

How many participants stopped trial drug due to adverse events?

In the secukinumab group, 2 out of 27 participants (7%) stopped taking it early due to adverse events. One participant experienced **pain in the spine** (spinal pain). The other participant experienced **obstruction of the intestine due to fecal matter** (fecaloma) and **an infection in the joint caused by bacteria** (arthritis bacterial).

In the placebo group, 2 out of 25 participants (8%) stopped taking it early due to adverse events. One participant experienced **cancer in the prostate** (prostate cancer) and the other participant experienced **a type of lung cancer** (squamous cell carcinoma of lung).

How was this trial useful?

Researchers learned that more participants who took secukinumab had continued relief without a flare and for a longer period of time compared to placebo.

There were no new secukinumab safety concerns seen in the participants during the trial. The safety results were consistent with previous findings in people treated with secukinumab.

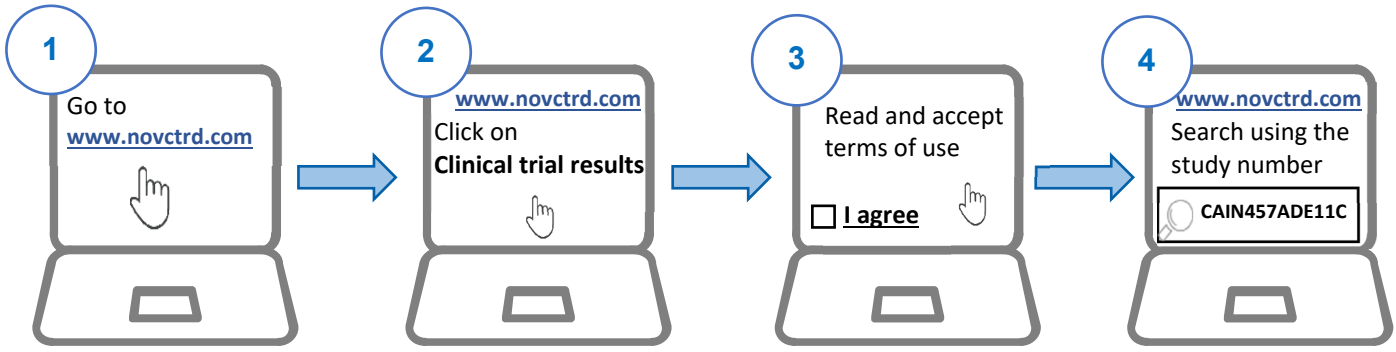
Results from this trial may be used in other clinical trials for people with GCA. A larger trial has been initiated to study secukinumab in people with GCA.

If you have any questions about these trial results, please talk to the doctor or staff at your trial site.

Where can I learn more about this trial?

More information about the results and adverse events in this trial can be found in the scientific summary of the results available on the Novartis Clinical Trial Results website (www.novctrd.com).

Please follow the below steps:



You can find more information about this trial on the following websites:

- www.clinicaltrials.gov Use the NCT identifier NCT03765788 in the search field.
- https://www.clinicaltrialsregister.eu/ctr-search/search Use the EudraCT identifier 2018-002610-12 in the search field.

Full clinical trial title: A randomized, parallel-group, double-blind, placebo-controlled, multicenter phase 2 trial to investigate the safety and efficacy of secukinumab (AIN457) in patients with giant cell arteritis.

Trial Dates: The trial started in January 2019 and ended in June 2021.

Thank you

Thank you for taking part in this trial. As a clinical trial participant, you belong to a large community of people around the world. You helped researchers answer important health questions and test new medical treatments.

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Novartis is a global healthcare company based in Switzerland that provides solutions to address the evolving needs of patients worldwide.

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