NOVARTIS

Clinical Trial Results Summary

A trial to learn about how well secukinumab works and how safe it is in participants with both plaque psoriasis and non-alcoholic fatty liver disease.

Protocol Number: CAIN457ADE15

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.

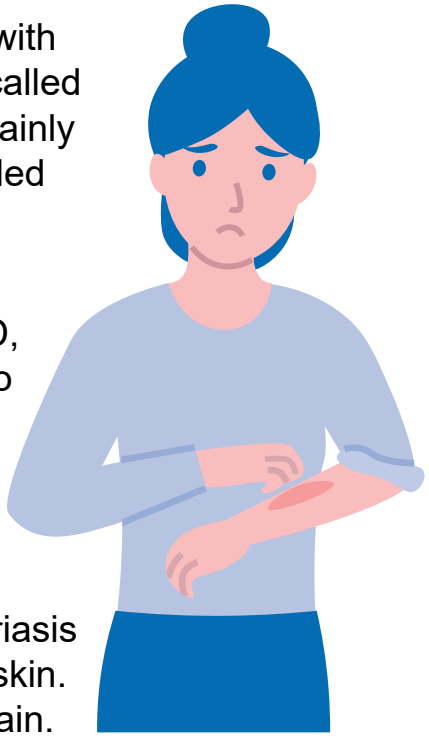
Thanks to the participants for taking part in this trial for the drug secukinumab, also known as AIN457. They helped researchers learn more about how secukinumab works in people with both plaque psoriasis and non-alcoholic fatty liver disease.

We hope this helps the participants understand their important role in medical research.

This summary only shows the results of a single clinical trial. Other clinical trials may have different findings. Websites listed at the end of the summary may have more information about this trial.

If you have any questions about the 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 patients with plaque psoriasis and non-alcoholic fatty liver disease, also called "NAFLD". Plaque psoriasis is a long-lasting condition that mainly affects the skin. It causes areas of thick, red, raised skin called plaques. These plaques may itch or feel sore.

In people with plaque psoriasis, the risk of developing some other conditions is higher. One of these conditions is NAFLD, a condition in which fat builds up in the liver. This can lead to liver damage and other medical problems. The participants in this trial had plaque psoriasis and NAFLD.

Inflammation is one of the ways the immune system protects the body from disease and infection. However, too much inflammation can be harmful. People with plaque psoriasis often have higher than normal levels of inflammation in the skin. This can cause swelling, redness, itching, and sometimes pain.

The trial drug, secukinumab, is designed to reduce the amount of inflammation in the body by stopping a protein in the immune system from working. This protein is called "IL-17A". People with plaque psoriasis and NAFLD often have higher than normal levels of IL-17A in the body. So, researchers think that secukinumab may help to reduce plaque psoriasis and NAFLD symptoms by stopping IL-17A from working.

There are treatments available for doctors to give to people who have plaque psoriasis. However, there are no current treatment options available for doctors to give to people who have NAFLD. So, researchers are looking for a better way to treat people with plaque psoriasis and NAFLD.

In this trial, the researchers wanted to learn more about how well secukinumab works in reducing plaque psoriasis symptoms in participants with plaque psoriasis and NAFLD. Secukinumab is currently approved for adult patients with moderate to severe plaque psoriasis to receive at a dose of 300 milligrams, also called "mg". It is approved for patients in more than 90 countries, including the US and the countries of the EU.

Drug	Pronounced as
secukinumab	se-cu-KIN-umab

How long was this trial?

This trial started in March 2020 and ended in July 2021. The entire trial lasted about 1.5 years, from enrolling the first participant to the last participant completing the trial. Individual participants were in this trial for an average of 16 weeks.

The sponsor ended this trial early. It was planned to include 90 participants. However, the researchers were only able to recruit 10 participants. They decided to end the trial early because they concluded that it would take too long to reach the planned number of participants. The decision to end this trial early was not related to safety. When the trial ended, the researchers created a report of the trial results. This summary is based on that report.

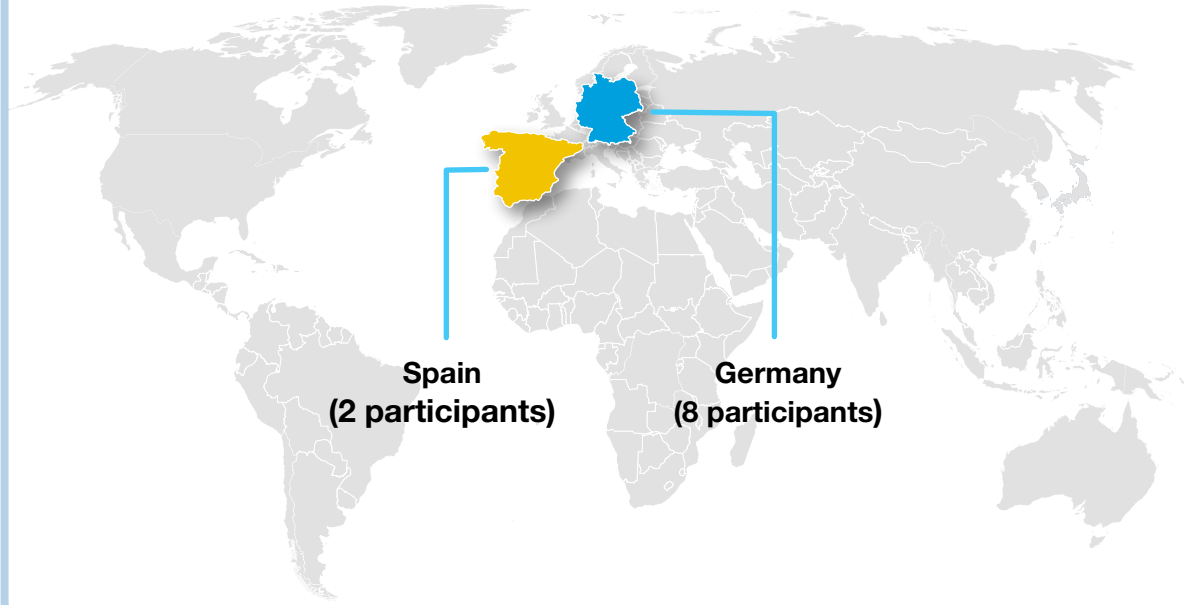
Who was in this trial?

The participants could take part in this trial if they:

- were 18 years of age or older
- had moderate to severe plaque psoriasis
- were diagnosed with NAFLD within 6 months before joining

A total of 10 participants from 2 countries participated in this trial.

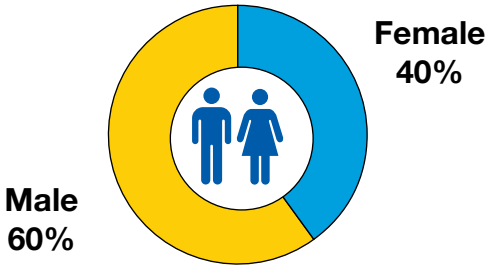
Number of participants from each country



The average age of participants was 39 years. Participants' age ranged from 19 to 64 years. The majority of participants were men, 6 out of 10 (60.0%).

Participants' Race

Participants' Sex



What treatments did the participants receive?

This was a double-blind trial. This means that none of the participants, trial doctors, or trial staff knew what trial drug the participants were receiving. Some trials are done this way because knowing what trial drug each participant is receiving can affect the results of the trial. Doing a trial this way helps to make sure that the results are looked at with fairness towards all trial drugs.

Researchers randomly assigned participants to treatment groups using a computer system. This process is called randomization. It means that each participant could be assigned to any group, and it helps to make sure the groups are assigned fairly.

This trial had 2 parts: Part 1 and Part 2.

In Part 1, participants were assigned to 1 of 2 groups from Week 1 to Week 12:

Secukinumab, 300 milligrams, also called “mg”, as an injection under the skin once every week until Week 4, and then one last injection at Week 8.

Placebo, which looked like **secukinumab**, but did not have any medicine in it. Using a placebo helps researchers better understand the effects of **secukinumab** by making sure that any changes were not happening by chance. The participants who received the placebo received it as an injection once every week until Week 4, and then one last injection at Week 8.

In Part 2, the participants all received secukinumab. Part 2 was from Week 12 to Week 24.

Participants who received **secukinumab in Part 1** received 300 mg of **secukinumab** 3 more times, as an injection under the skin at Weeks 12, 16, and 20.

Participants who received the **placebo in Part 1** received 300 mg of **secukinumab** as an injection under the skin at Week 12, 13, 14, 15, 16, and Week 20.

Along with the trial drugs above, participants could take other treatments for plaque psoriasis.

What happened during this trial?

Before treatment

- The researchers randomly assigned participants into 1 of the following 2 groups:
  Group 1: 300 mg of secukinumab as an injection under the skin
  Group 2: The placebo as an injection under the skin
- None of the participants, trial doctors, or trial staff knew what trial drug the participants were receiving

Up to 4 weeks

During treatment in Part 1

Group 1: 7 participants received 300 mg of secukinumab 6 times
Group 2: 3 participants received the placebo 6 times

The participants:
- visited their trial site 7 times
- had tests done to check the severity of their disease
- filled out questionnaires about their plaque psoriasis and NAFLD symptoms
- had their overall health checked and answered questions about any medical problems they were having

Up to 12 weeks

During treatment in Part 2

- **Group 1:** 4 participants received 300 mg of secukinumab 3 times
- **Group 2:** 2 participants received 300 mg of secukinumab 6 times

The participants:
- visited their trial site 6 times
- had tests done to check the severity of their disease
- filled out questionnaires about their plaque psoriasis and NAFLD symptoms
- had their overall health checked and answered questions about any medical problems they were having

Up to 8 weeks

After treatment

The participants:
- visited their trial site 1 time at Week 24
- had tests done to check the severity of their disease
- filled out questionnaires about their plaque psoriasis and NAFLD symptoms
- had their overall health checked and answered questions about any medical problems they were having

Up to 4 weeks after their last dose

What were the main results of the trial?

Did secukinumab help to reduce plaque psoriasis symptoms in participants who have psoriasis and NAFLD after 12 weeks of treatment?

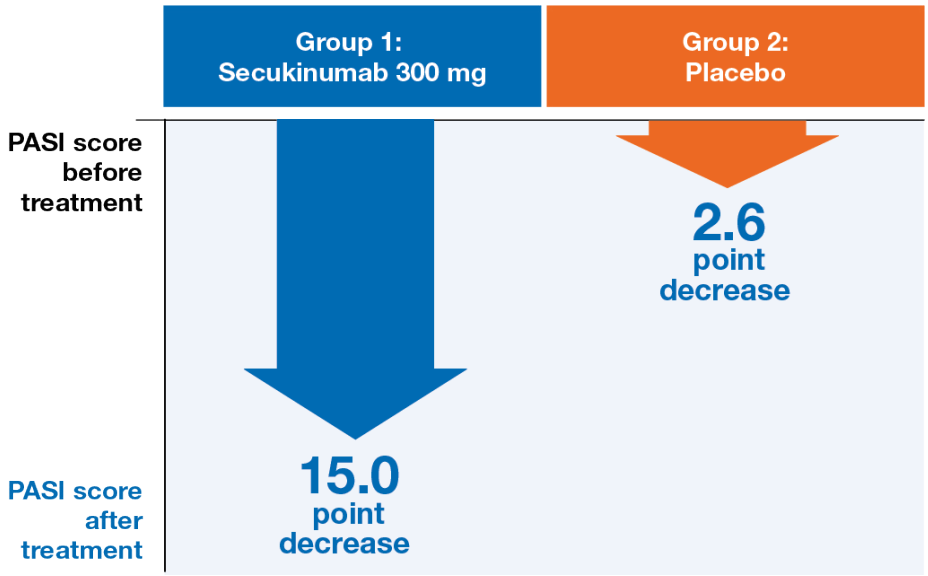
Overall, the researchers found that after 12 weeks of treatment, the participants' plaque psoriasis symptoms improved more after treatment with secukinumab compared to treatment with the placebo. However, because of the small number of participants in the trial, the researchers could not conclude that the results were meaningful.

To answer this question, the researchers used a scale called the Psoriasis Area and Severity Index, also called the "PASI". The PASI measures how severe psoriasis is in 4 body areas. The researchers wanted to learn how many participants had at least 90.0% less psoriasis in these areas after 12 weeks of treatment. A decrease in PASI score meant that the participants' psoriasis symptoms had become less severe.

After the participants received treatment for 12 weeks in Part 1, the researchers found that the average change in PASI score was:

- **15.0 point decrease** for the participants in **Group 1. Group 1 included 4 participants.**
- **2.6 point decrease** for the participants in **Group 2**. **Group 2 included 2 participants.**

Change in PASI score after 12 weeks of treatment in Part 1



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 any 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 drugs.

How many participants had adverse events?

The adverse events that happened in the participants during the trial are listed in the table below.

Adverse Events

	Secukinumab (out of 7 participants)	Placebo (out of 3 participants)
At least 1 adverse event	 **71.4%** 5 out of 7	 **66.6%** 2 out of 3
At least 1 non-serious adverse event	 **57.1%** 4 out of 7	 **66.6%** 2 out of 3
At least 1 serious adverse event	 **14.3%** 1 out of 7	 **0.0%** **0 out of 3**
Deaths	 **0.0%** **0 out of 7**	 **0.0%** **0 out of 3**
Stopped receiving trial drug due to adverse event	 **0.0%** 0 out of 7	 **33.3%** 1 out of 3
At least 1 adverse event that required treatment	 **14.3%** 1 out of 7	 **66.6%** 2 out of 3

There was 1 participant who stopped receiving the trial drug due to worsening psoriasis.

What serious adverse events did the participants have?

Number of Participants with Serious Adverse Events

	Secukinumab (out of 7 participants)	Placebo (out of 3 participants)
Increased levels of a protein called aspartate aminotransferase in the blood, a possible sign of liver damage (Aspartate aminotransferase increased)	 **14.3%** 1 out of 7	 **0.0%** **0 out of 3**

What were the most common non-serious adverse events?

The most common non-serious adverse events that happened in at least 20.0% of participants overall (2 out of 10) are presented below.

Number of Participants With Most Common Non-serious Adverse

	Secukinumab (out of 7 participants)	Placebo (out of 3 participants)
Common cold (Nasopharyngitis)	 **28.6%** 2 out of 7	 **0.0%** **0 out of 3**
Headache	 **14.3%** 1 out of 7	 **33.3%** 1 out of 3
Increased levels of a protein called creatine phosphokinase in the blood, a sign of muscle weakness (Blood creatine phosphokinase increased)	 **14.3%** 1 out of 7	 **33.3%** 1 out of 3

How was this trial useful?

The trial helped researchers to learn about how well secukinumab works and how safe it is in participants with both plaque psoriasis and NAFLD. The trial ended early because the researchers concluded that it would take too long to reach the planned number of participants. The decision to end this trial early was not related to safety.

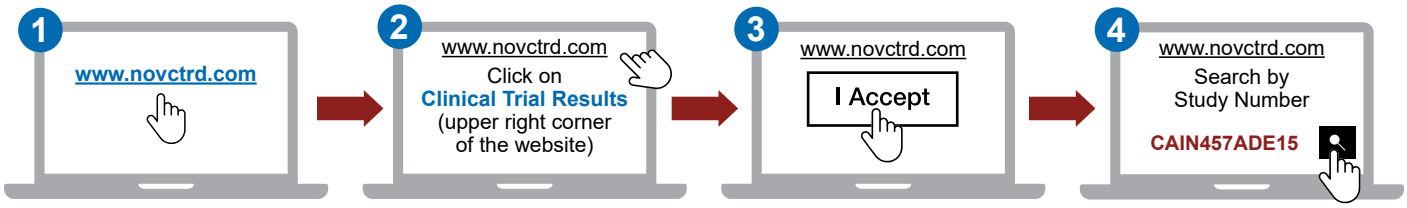
This is a summary of the overall results for all participants in both treatment groups. It does not show the results of each individual participant. Results of individual participants could be different from the results of the total group of participants.

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 and future trials?

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:

- https://www.clinicaltrials.gov/ Use the NCT identifier NCT04237116 in the "other terms" field.
- https://www.clinicaltrialsregister.eu/ctr-search Use the EudraCT identifier 2019-003168-37 in the search field.

Full clinical trial title: A randomized, double-blind, multicenter, 24-week study of subcutaneous secukinumab to assess anti-interleukin-17A treatment in plaque psoriasis patients with coexisting non-alcoholic fatty liver disease (pINPOINt)

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.

NOVARTIS

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

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