NOVARTIS

Clinical Trial Results Summary

A clinical trial to learn more about the safety of ABL001 in people with impaired kidney function

Protocol number: CABL001A2105

Thank You!

Novartis, the sponsor of this clinical trial, would like to thank you for taking part in this trial for the drug ABL001, also known as asciminib. You helped researchers learn more about how safe ABL001 is for people with impaired kidney function.

As a clinical trial participant, you belong to a large community of people around the world. Your invaluable contribution to medicine and healthcare is greatly appreciated.

This summary only shows the results of a single clinical trial. Other clinical trials may have different findings. Researchers and health authorities look at the results of many clinical trials to understand which drugs work and if they are safe. It takes many people in multiple clinical trials around the world to advance medical science and healthcare. 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 are looking for better ways to treat **chronic myeloid leukemia (CML)**. CML is a rare blood cancer that usually happens in older adults. CML starts in bone marrow, which is the inside of bones where new blood cells form. People with CML have a protein in some of their blood cells called **BCR-ABL**. This protein causes bone marrow to make cancer blood cells and allows the cancer blood cells to grow and spread. People who do not have CML do not have the BCR-ABL protein.

At first, CML does not always cause symptoms. When symptoms happen, they often include feeling very tired and weak, sweating more than usual, losing weight without trying, and bleeding more easily. Over time, CML can become a more serious type of leukemia (blood cancer) that can spread more quickly and become life-threatening.

ABL001 is a trial drug that blocks the BCR-ABL protein. ABL001 may be a possible treatment for CML.

This trial was designed to learn about the blood levels of ABL001 in people with **impaired kidney function**, which means the kidneys aren't working as well as normal. One of the ways the body removes drugs from the blood is through the kidneys. The kidneys filter waste, some drugs, and extra water out of the blood through urine (pee). When the kidneys don't work as well as normal, a drug can stay in the blood longer and build up to higher levels in the blood.

In this trial, researchers compared the levels of ABL001 in the blood of participants with severely impaired kidney function to those with normal kidney function after participants took one dose. None of the participants in this trial had CML.

Trial drug

The drug taken in this trial was:

ABL001, also known as asciminib, taken by mouth as a 40 mg pill

In addition to the treatment above, participants could take their regular medicines to treat their impaired kidney function.

Trial purpose

This trial was done to learn more about the safety of ABL001. The main questions the researchers wanted to answer in this trial were:

- Did impaired kidney function affect the levels of ABL001 in the participants' blood over 72 hours?
- What medical problems did the participants have during the trial?

How long was this trial?

Each participant was in this trial for up to 8 weeks. The trial started in November 2018 and ended in April 2019. The trial had 2 parts:

- Part 1: Focused on participants with severely impaired kidney function. It was completed.
- Part 2: Would have focused on participants with mild-to-moderately impaired kidney function. It was not started because the results of Part 1 showed that more research was not needed.

Why wasn't Part 2 needed?

Researchers had planned to start Part 2 of this trial only if participants with severely impaired kidney function had blood levels of ABL001 that were at least **2 times higher** than participants with normal kidney function. Researchers set this level before the trial started because previous research with ABL001 showed that less than 2 times higher was considered a safe level of ABL001 in the blood.

After reviewing the results from Part 1, the researchers found that blood levels of ABL001 in participants with severely impaired kidney function were less than 2 times higher than those with normal kidney function. There was no need to start Part 2 of the trial.

When the trial ended, the researchers collected information on the trial treatment and created a report of the trial results. This summary is based on that report.

Who was in this trial?

14 participants were in this trial – 9 men and 5 women. None of them had CML (chronic myeloid leukemia). They were divided into 2 groups:

- 8 participants with **severely impaired kidney function** who:
  - Had stable kidney disease
  - Did not require dialysis (a treatment that filters the blood with a machine or fluid when the kidneys are no longer working)
  - Were in otherwise good overall health
- 6 participants with **normal kidney function**

The 2 groups were similar in age, body weight, and number of men and women.

Participants' ages ranged from 46 to 71 years. They were 58 years old on average.

Participants took part at trial sites in:

- Bulgaria – 8 participants
- Germany – 6 participants

What kind of trial was this?

This was a phase I, open-label trial, which means that the participants and clinical trial team knew what treatment each participant took. In this trial, all participants took ABL001.

What happened during this trial?

During screening

Up to 3 weeks before taking ABL001, trial doctors checked each participant's health and kidney function to make sure they could be in this trial. 14 participants could take part in this trial. The day before each participant took their treatment, the participant stayed at the clinic so that trial doctors could check their health.

During treatment

Participants took one dose of:

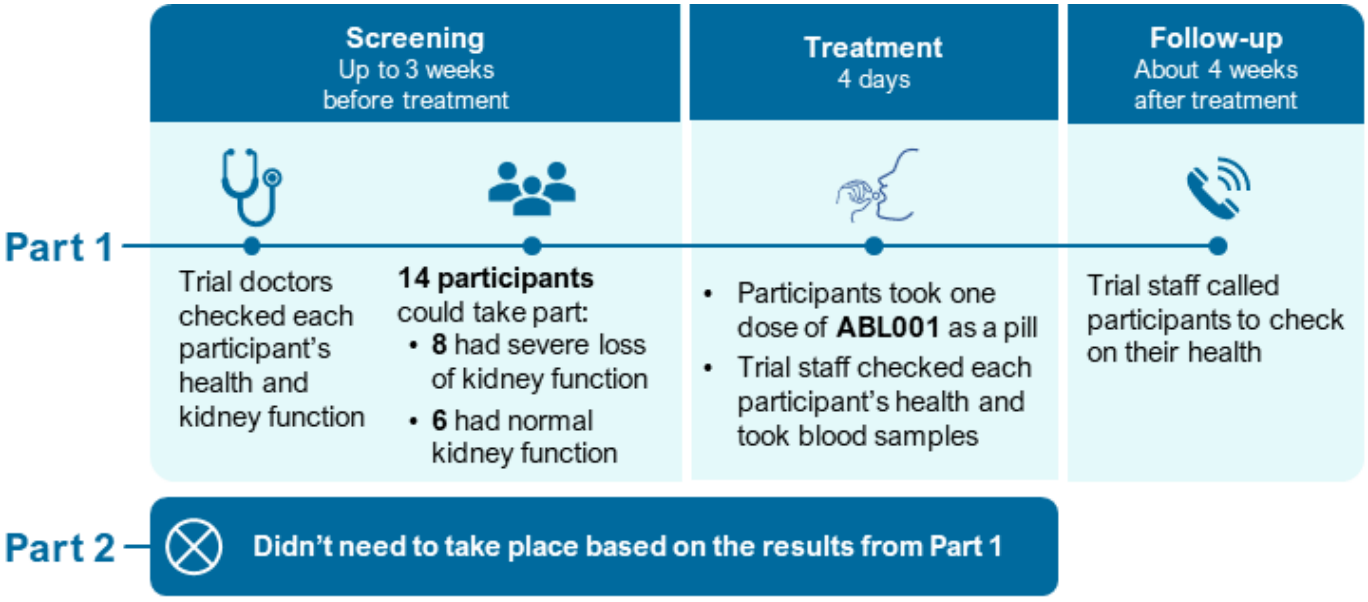
- 40 mg (milligrams) **ABL001** as a pill

Participants could not eat for 10 hours before or 4 hours after taking ABL001. This is because eating food can change how quickly a drug gets into the blood. Participants stayed at the trial site for 4 days during treatment. Trial staff took blood samples during this period.

During follow-up

Trial staff called participants about 4 weeks after they took ABL001 to check on their health.

How researchers designed this trial:



What were the main results of this trial?

This is a summary of the overall results for all participants. 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. More details on the results can be found on the websites listed at the end of this summary.

Did impaired kidney function affect the levels of ABL001 in the participants' blood over 72 hours?

The participants gave many blood samples during the 72 hours after they took ABL001. The researchers compared the levels of ABL001 in the blood of participants with severely impaired kidney function to those with normal kidney function.

On average, participants with severely impaired kidney function had **higher overall levels** of ABL001 in their blood over 72 hours than those with normal kidney function, but it was less than 2 times higher.

What medical problems did the participants have during the trial?

Medical problems that happen in clinical trials are called "adverse events". An adverse event is an unwanted sign or symptom 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.

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. So, when new drugs are being studied, researchers keep track of all adverse events the participants have.

This section is a summary of the adverse events that happened during the treatment and follow-up periods. The websites listed at the end of this summary have more information about the adverse events that happened in this trial.

What were the serious adverse events?

No participants had serious adverse events or died during this trial.

What were the non-serious adverse events?

All non-serious adverse events that happened during this trial are listed in the table below.

	Normal kidney function	Severely impaired kidney function
	Percent % (out of 6 participants)	**Percent %** (out of 8 participants)
Possible signs of pancreas damage Amylase increased	**0%** (0)	**38%** (3)
Lipase increased	**0%** (0)	**13%** (1)
Low white blood cell count Neutropenia	**0%** (0)	**38%** (3)
Headache	**0%** (0)	**25%** (2)
Dizziness	**17%** (1)	**0%** (0)
Feeling sick to the stomach Nausea	**17%** (1)	**0%** (0)

How has this trial helped?

This trial helped researchers learn how kidney function affects the body's ability to remove ABL001 and how safe it is to use in people with impaired kidney function. Participants with severely impaired kidney function had blood levels of ABL001 that were less than 2 times higher than participants with normal kidney function. Researchers also learned that the participants in this trial did not have any major medical problems after they took ABL001.

Because the level of ABL001 in people with severely impaired kidney function was not high enough, it was not necessary to do more research in people with mild-to-moderately impaired kidney function. Results from this trial may help inform the use of ABL001 for people with CML.

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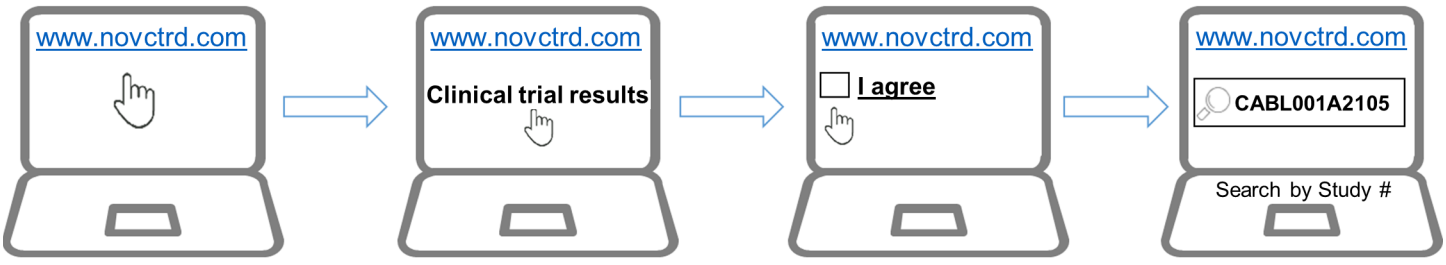
Where can I learn more about this trial?

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).



You can find more information about this trial on this website:

- www.clinicaltrials.gov. Use the NCT identifier 03605277 in the search field.

Full clinical trial title: A Phase I, open-label and single-dose study to evaluate the pharmacokinetics and safety of a single 40 mg oral dose of ABL001 (asciminib) in subjects with impaired renal function compared to matched control subjects with normal renal function

Thank you

Thank you for taking part in this trial. As a clinical trial participant, you belong to a large community of participants 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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