Clinical Study Results

This summary reports the results of only one study. Researchers must look at the results of many types of studies to understand if a study medication works, how it works, and if it is safe to prescribe to study participants. The results of this study might be different than the results of other studies that the researchers review.

Sponsor:	Pfizer Inc.
Medicine(s) Studied:	CIBINQO® (Abrocitinib)
Protocol Number:	B7451037
Dates of Study:	18 June 2020 to 16 November 2021
Title of this Study:	Study of Inflammation in the Skin of Participants with Atopic Dermatitis Treated with Abrocitinib [A Phase 2a, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Multicenter Study to Investigate the Mechanism of Action of Abrocitinib Monotherapy in Adult Participants With Moderate-to-Severe Atopic Dermatitis]
Date(s) of this Report:	23 January 2023

– Thank You –

If you participated in this study, Pfizer, the Sponsor, would like to thank you for your participation.

This summary will describe the study results. If you have any questions about the study or the results, please contact the doctor or staff at your study site.

Why was this study done?

What is atopic dermatitis?

Atopic dermatitis (or "AD") is a common skin disorder that causes patches of flaky, red, and very itchy skin. It is also called atopic eczema. Some of the current medicines available for AD are not suitable for everyone. This means researchers are looking for new treatments that are both safe and effective for AD.

While many things can cause AD, it is made worse by the body's immune system (the body's defense against infection) causing redness and swelling (inflammation). Cells in the immune system trigger inflammation by making special proteins called "cytokines". Researchers think that medicines that modify the way these cytokines work could help treat patients with AD.

What is abrocitinib?

The treatment tested in this study was PF-04965842, which now has the generic name abrocitinib, and sold as CIBINQO®. Abrocitinib may block the activity of a protein called "Janus kinase 1". This acts like an on/off switch for the cells of the immune system. By blocking Janus kinase 1 activity, the signal to the cells that triggers inflammation is modified.

What was the purpose of this study?

The purpose of this study was to learn if treatment with abrocitinib for 12 weeks could reduce the amount of inflammation in the skin of participants with moderate to severe AD.

Researchers wanted to know:

Did treatment with abrocitinib change the amount of inflammation in the skin of the participants with AD?

What happened during the study?

How was the study done?

Researchers studied 3 groups of participants. The first group received 100 mg abrocitinib once a day by mouth. The second group received 200 mg abrocitinib once a day by mouth. The third group received placebo once a day by mouth. A placebo does not have any medicine in it, but it looks just like abrocitinib. Participants were treated for 12 weeks. The study participants and researchers did not know who took abrocitinib and who took the placebo. This is known as a "blinded" or "double-blinded" study. Study participants were assigned to each group by chance alone.

- 100 mg abrocitinib: 16 participants
- 200 mg abrocitinib: 14 participants
- Placebo: 16 participants

Researchers then compared the results of participants taking abrocitinib to the results of participants taking a placebo.

Figure 1 on the next page shows what happened in the study.

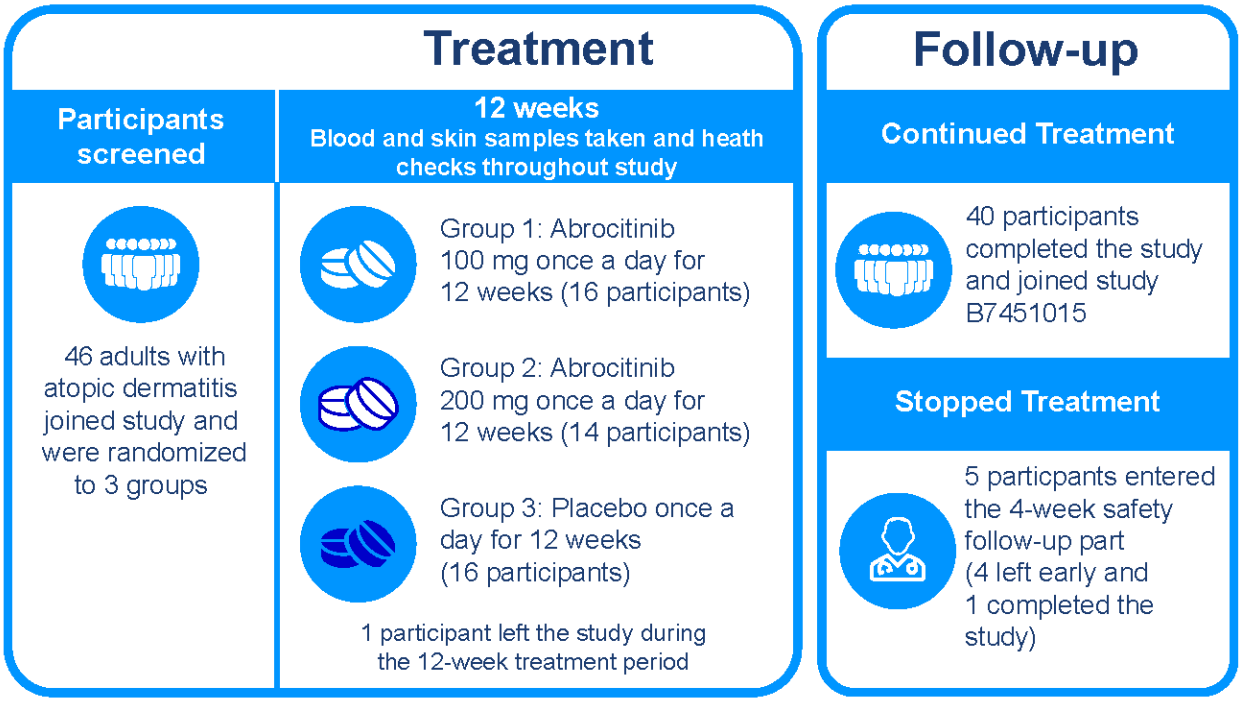
Where did this study take place?

The Sponsor ran this study at 11 locations in the US and Canada.

When did this study take place?

It began 18 June 2020 and ended 16 November 2021.

Figure 1: Study Design



Study B7451015 allowed participants to continue to receive treatment with abrocitinib for atopic dermatitis.

Who participated in this study?

The study included participants who were adults who had been diagnosed with moderate to severe AD for at least 1 year. Participants should have been unsuccessfully treated with ointments or creams for their AD or have taken oral treatment.

- A total of 25 men participated
- A total of 21 women participated

- All participants were between the ages of 18 and 78 years

Participants were to be treated for 12 weeks. Of the 46 participants who started the study, 6 participants did not complete the study. This included 1 participant who did not complete the 12 weeks of treatment and 5 participants who entered the safety follow-up period but did not complete this part. There were 40 participants who finished 12 weeks of treatment and who joined Study B7451015. This allowed them to receive treatment with abrocitinib for AD.

There were 5 participants who stopped treatment because of medical problems. Two (2) participants who left the study because of medical problems.

How long did the study last?

Study participants were in the study for around 5 months or 20 weeks. The entire study took around 1 year and 5 months to complete.

When the study ended in November 2022, the Sponsor began reviewing the information collected. The Sponsor then created a report of the results. This is a summary of that report.

What were the results of the study?

Did treatment with abrocitinib for 12 weeks change the amount of inflammation in the skin of the participants with AD?

To answer this question, the researchers looked at the formation of certain gene products, or messenger ribonucleic acid (mRNA) in the skin. The mRNA is used by the body to make specific proteins. These mRNAs are produced by the body during inflammation and can be used as markers for inflammation. Depending on the marker, the presence or absence of the mRNA can show if inflammation has increased or decreased. In this study, the researchers looked at the levels of the following mRNA in skin:

- MMP12

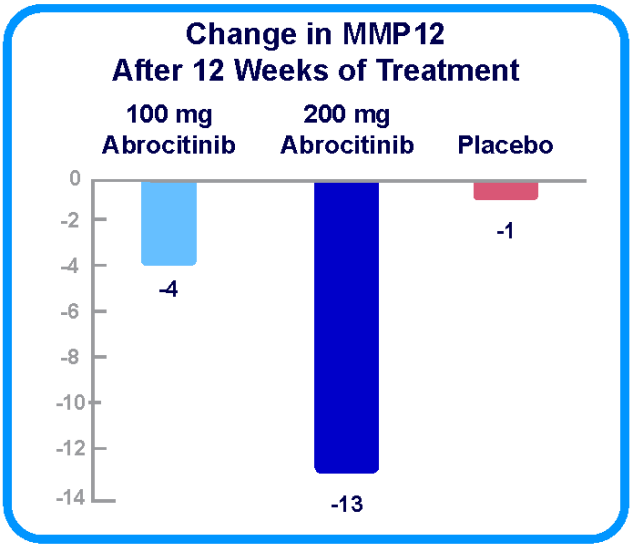
- KRT16
- CCL17, CCL18, and CCL26, and
- S100A8, S100A9, and S100A12.

More information about these markers is given in the following section of this document.

Did abrocitinib reduce MMP12 mRNA in skin compared to placebo?

The mRNA for MMP12 can be used to assess the amount of general inflammation in the skin. Figure 2 shows what happened to levels of MMP12 after 12 weeks of treatment with once daily 100 mg abrocitinib, 200 mg abrocitinib, or placebo. In this study, treatment with 200 mg abrocitinib reduced the formation of MMP12 more than was seen with 100 mg abrocitinib. The effect on the formation of MMP12 is greater with abrocitinib than placebo.

Figure 2: Change in General Inflammation Levels in Skin With Abrocitinib Treatment

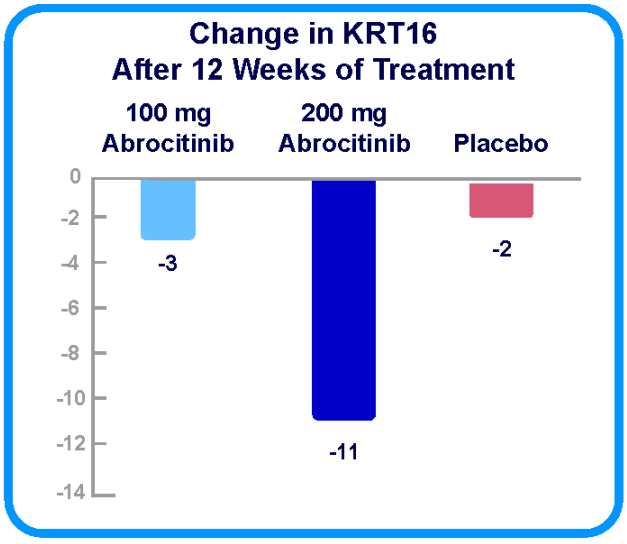


Did abrocitinib reduce KRT16 mRNA in skin compared to placebo?

KRT16 mRNA is found in skin and nails and increased levels are seen in skin inflammation and thickening in AD.

Figure 3 shows what happened to mRNA for KRT16 after 12 weeks of treatment with once daily 100 mg abrocitinib, 200 mg abrocitinib, or placebo. In this study, treatment with 200 mg abrocitinib reduced the formation of KRT16 more than was seen with 100 mg abrocitinib. The effect on the formation of KRT16 is greater with abrocitinib than placebo.

Figure 3: Change in Skin Inflammation With Abrocitinib Treatment

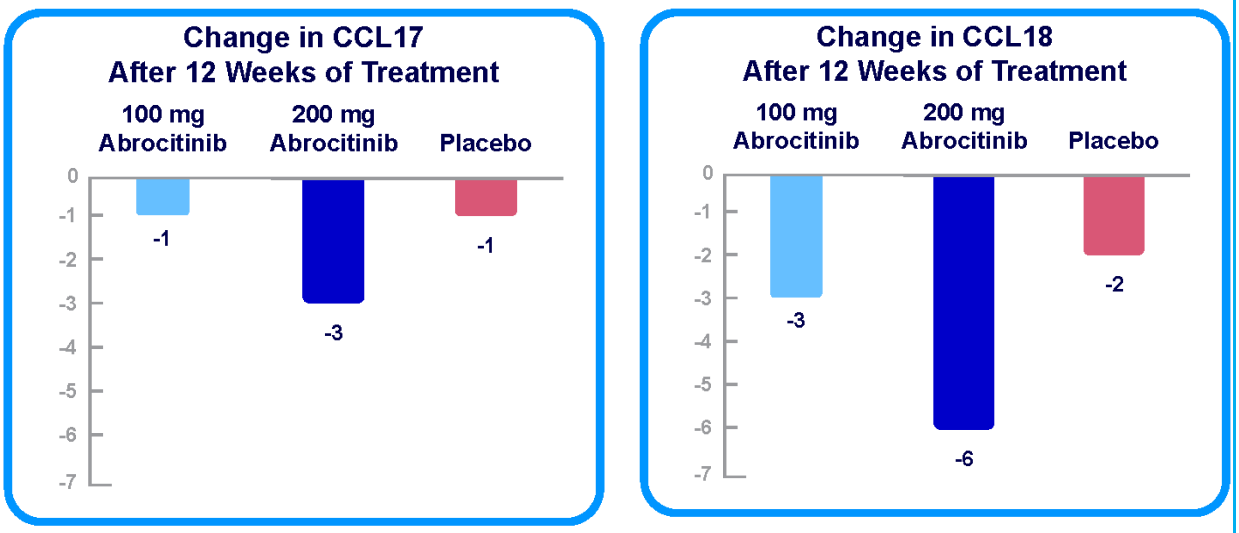


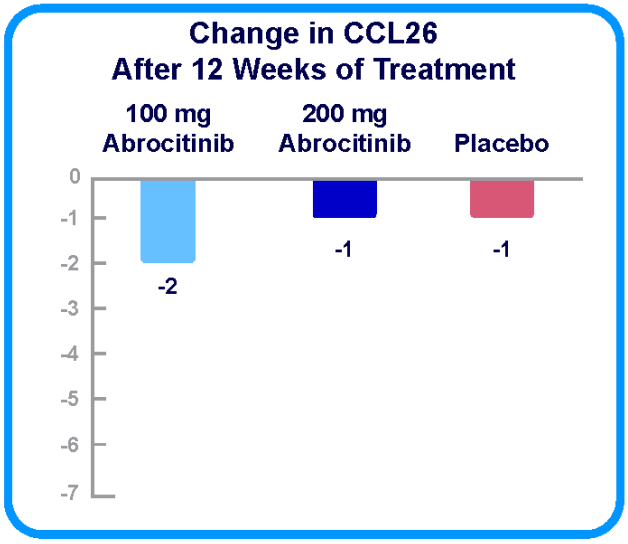
Did abrocitinib reduce CCL17, CCL18, and CCL26 mRNA in skin compared to placebo?

CCL17, CCL18, and CCL26 mRNAs can be increased in AD skin lesions, often due to an infection.

Figure 4 shows what happened to CCL17, CCL18, and CCL26 mRNA after 12 weeks of treatment with once daily 100 mg abrocitinib, 200 mg abrocitinib, or placebo. In this study, treatment with 200 mg abrocitinib reduced levels of CCL17 and CCL18 more than was seen with 100 mg abrocitinib or with placebo. The changes in CCL17 and CCL18 seen with 100 mg abrocitinib were not very different to the changes seen with placebo. For CCL26, the greatest reduction was seen with 100 mg abrocitinib, but this was quite similar to the change seen with 200 mg abrocitinib or placebo.

Figure 4: Change in CCL17, CCL18, and CCL26 in Skin With Abrocitinib Treatment



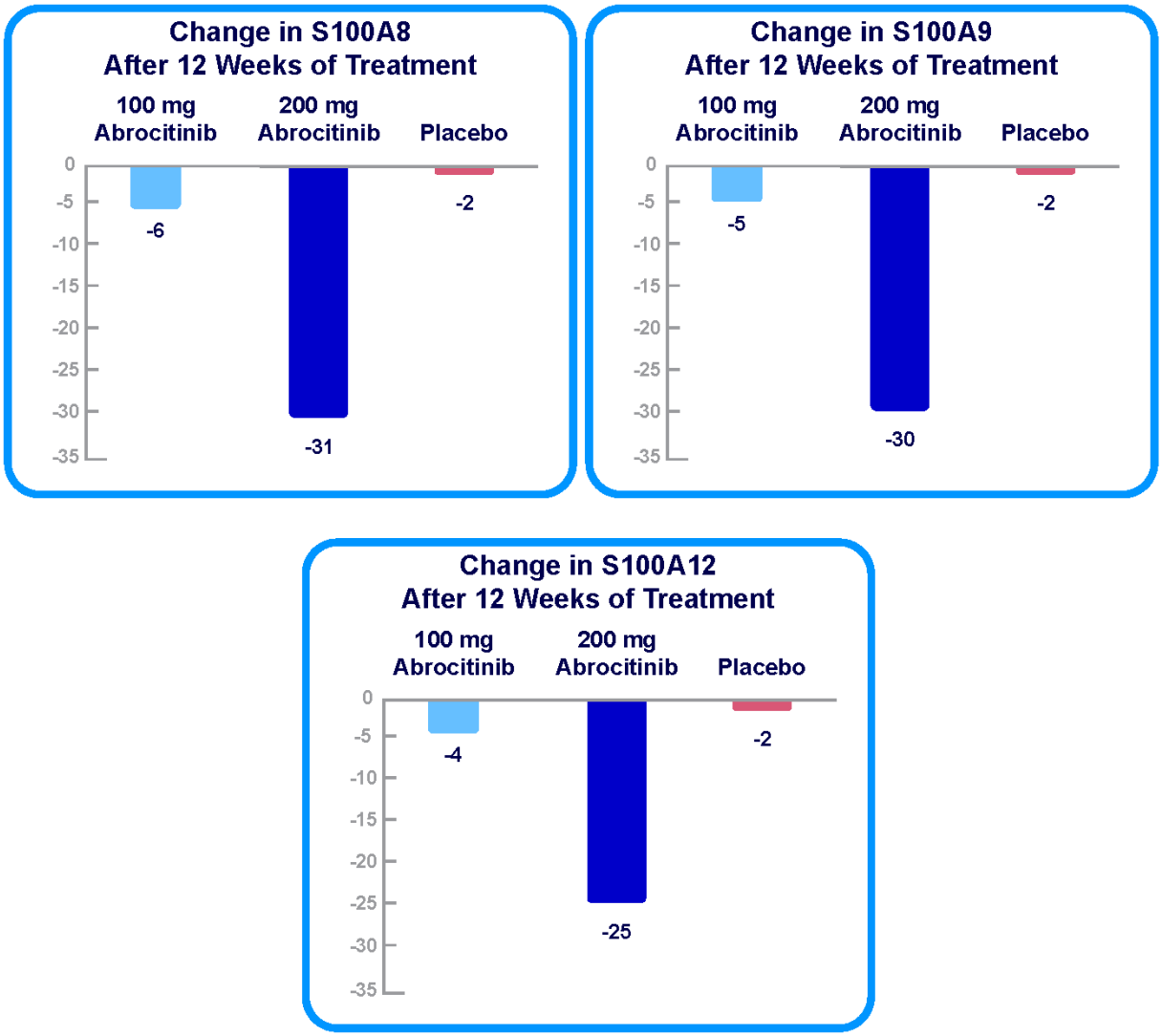


Did abrocitinib reduce the amount of S100A8, S100A9, and S100A12 mRNA in skin compared to placebo?

If S100A8, S100A9, and S100A12 mRNAs are increased in the skin, then this could mean there is inflammation under the skin.

Figure 5 shows what happened to S100A8, S100A9, and S100A12 mRNA after 12 weeks of treatment with once daily 100 mg abrocitinib, 200 mg abrocitinib, or placebo. In this study, treatment with 200 mg abrocitinib reduced the formation of S100A8, S100A9, and S100A12 more than was seen with 100 mg abrocitinib. The effect on the formation of S100A8, S100A9, and S100A12 is greater with abrocitinib than placebo.

Figure 5: Change in S100A8, S100A9, and S100A12 in Skin With Abrocitinib Treatment



Abrocitinib may reduce inflammation in the skin of participants with AD. The differences between groups could have been due to chance.

This does not mean that everyone in this study had these results. This is a summary of just some of the main results of this study. Other studies may have different results.

What medical problems did participants have during the study?

The researchers recorded any medical problems the participants had during the study. Participants could have had medical problems for reasons not related to the study (for example, caused by an underlying disease or by chance). Or, medical problems could also have been caused by a study treatment or by another medicine the participant was taking. Sometimes the cause of a medical problem is unknown. By comparing medical problems across many treatment groups in many studies, doctors try to understand what effects a study medication might have on a participant.

Twenty-five (25) out of 46 (54%) participants in this study had at least 1 medical problem. A total of 5 participants left the study because of medical problems. This included 2 of the 16 participants (13%) in the 100 mg abrocitinib group, 1 of the 14 participants (7%) in the 200 mg abrocitinib group, and 2 of the 16 participants (13%) in the placebo group. The most common medical problems – those reported by more than a 1 participant – are described below.

Below are instructions on how to read Table 1.

Instructions for Understanding Table 1.

- The **1st** column of Table 1 lists medical problems that were commonly reported during the study. All medical problems reported by more than 1 participant are listed.
- The **2nd** column tells how many of the 16 participants taking 100 mg abrocitinib reported each medical problem. Below this number is the percentage of the 16 participants taking 100 mg abrocitinib who reported the medical problem
- The **3rd** column tells how many of the 14 participants taking 200 mg abrocitinib reported each medical problem. Below this number is the

percentage of the 14 participants taking 200 mg abrocitinib who reported the medical problem.

- The **4th** column tells how many of the 16 participants taking placebo reported each medical problem. Below this number is the percentage of the 16 participants taking placebo who reported the medical problem.
- Using these instructions, you can see that 3 of the 16 participants (19%) taking 100 mg abrocitinib reported a feeling of sickness (nausea). There were 4 out of the 14 participants (29%) taking 200 mg abrocitinib who reported a feeling of sickness (nausea). There was 1 out of the 16 participants (6%) taking placebo who reported a feeling of sickness (nausea).

Table 1. Commonly reported medical problems

Medical Problem	100 mg Abrocitinib (16 Participants)	200 mg Abrocitinib (14 Participants)	Placebo (16 Participants)
Feeling of sickness (nausea)	3 out of 16 participants (19%)	4 out of 14 participants (29%)	1 out of 16 participants (6%)
Dizziness	2 out of 16 participants (13%)	1 out of 14 participants (7%)	0 out of 16 participants (0%)
Headache	1 out of 16 participants (6%)	2 out of 14 participants (14%)	0 out of 16 participants (0%)

Did study participants have any serious medical problems?

A medical problem is considered "serious" when it is life-threatening, needs hospital care, or causes lasting problems.

One (1) participant (6%, or 1 out of 16 participants) had serious medical problems. This participant took placebo and had the serious medical problems of a skin infection caused by the herpes virus (eczema herpeticum), an infection of the eye lid (periorbital cellulitis), and blood poisoning (sepsis).

None of the participants who took abrocitinib during the study had serious medical problems.

No participants died during the study.

Where can I learn more about this study?

If you have questions about the results of your study, please speak with the doctor or staff at your study site.

The full scientific report of this study is available online at:

www.clinicaltrials.gov
www.pfizer.com/research/research_clinical_trials/trial_results

Use the study identifier **NCT03915496**
Use the protocol number **B7451037**

Please remember that researchers look at the results of many studies to find out which medicines can work and are safe for patients.

Again, if you participated in this study,
thank you for volunteering.
We do research to try to find the
best ways to help patients, and you helped
us to do that!