CLINICAL TRIAL 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 medicine works, how it works, and if it is safe to prescribe to patients. The results of this study might be different than the results of other studies that the researchers review.

Sponsor: Pfizer, Inc.

Medicine(s) Studied: Abrocitinib (PF-04965842)

Protocol Number: B7451013

Dates of Trial: 29 June 2018 to 13 August 2019

Title of this Trial: Study to Measure the Efficacy and Safety of Abrocitinib (PF-04965842) in Subjects Aged 12 Years And Older, With Moderate to Severe Atopic Dermatitis

[A Phase 3 Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Multi-Center Study to Evaluate the Efficacy and Safety of PF-04965842 Monotherapy in Subjects Aged 12 Years and Older, With Moderate to Severe Atopic Dermatitis]

Date of this Report: 02 March 2020

– Thank You –

Pfizer, the Sponsor, would like to thank you and/or your child for participation in this clinical trial and provide you a summary of results representing everyone who participated. If you have any questions about the study or results, please contact the doctor or staff at your study site.

WHY WAS THIS STUDY DONE?

Atopic dermatitis (or "AD"), which is also sometimes called atopic eczema, is a common skin disorder that causes patches of flaky, red, and very itchy skin. AD occurs in 1% to 3% of adults and 15% to 20% of children worldwide. Some of the current medicines available for AD can only be used for short time periods, or can cause other health problems. Researchers are looking for new treatments for AD that can be taken for long periods of time.

While researchers think that many things 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 cause inflammation by making special proteins called "cytokines". Researchers think that medicines that lower the amount of cytokines that the body makes could help treat patients with AD.

The drug tested in this study was PF-04965842, which now has the generic name abrocitinib. Abrocitinib is an experimental drug that has not been approved for sale. Abrocitinib blocks the activity of a protein called "Janus kinase 1", which acts like a switch for the cells of the immune system. By turning off this switch, the cells of the immune system are expected to produce fewer cytokines that are believed to make AD worse. The researchers wanted to ask,

- **Are patients who take abrocitinib more likely to have their AD improve compared to patients who are treated with a placebo?**

To do this, researchers used 2 tests to measure the severity of each patient's AD at the beginning of the study. The researchers measured the severity of AD during 12 weeks of study treatment. The difference in severity was used to decide if a patient's AD had improved or not.

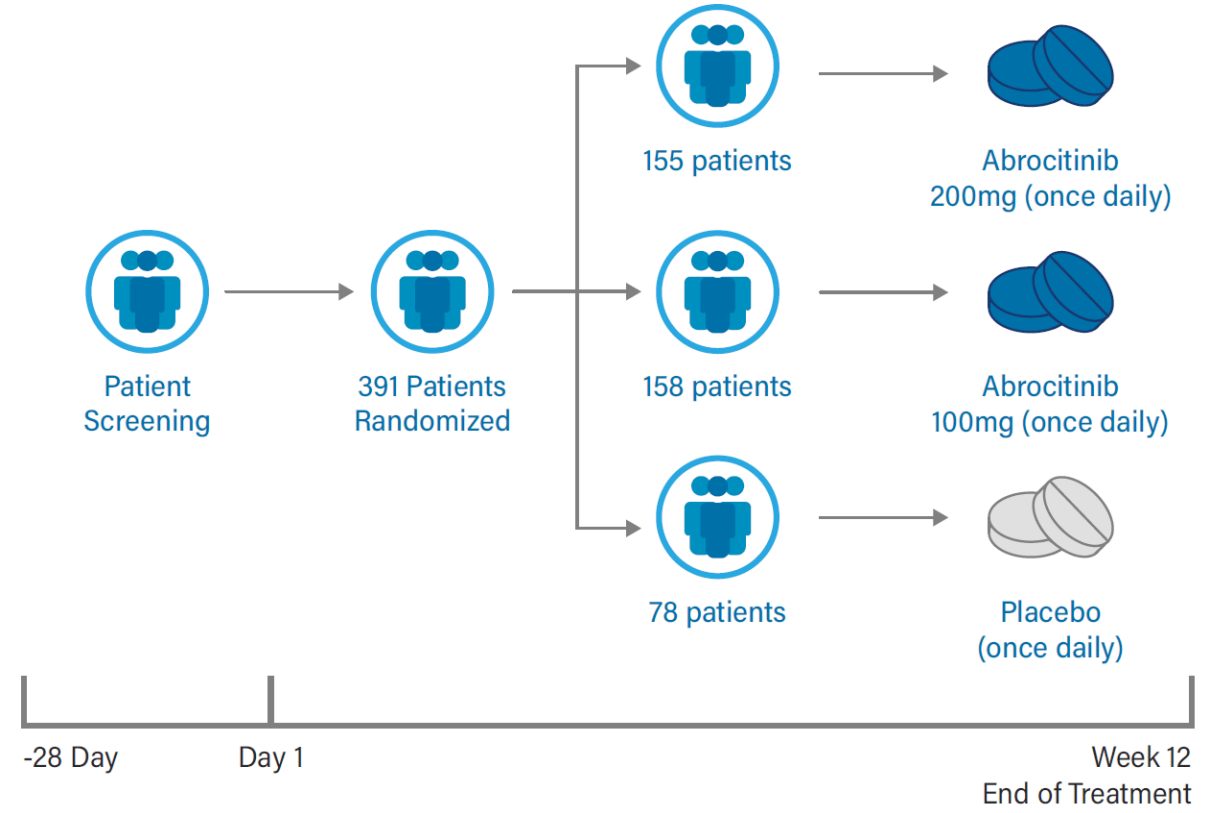
WHAT HAPPENED DURING THE STUDY?

This study compared 3 groups of patients to find out if patients taking abrocitinib had their AD improved compared to patients taking placebo. A placebo does not have any medicine in it, but looks just like the medicine.

The study included adult men and women, and adolescents who were aged 12 years and older. Patients included in the study:

- Had chronic (long-term) AD for at least 1 year, and had moderate to severe AD when they entered the study.
- Also had one of the following:
  - Had been treated up to 6 months earlier for AD with medicines applied to the skin, and their AD did not get better;
  - Were unable to use medicines on the skin because of a medical problem;
  - Needed to use medicines that reach all parts of the body to control their AD (for example, taking medicines by mouth).

The patients and researchers did not know who took abrocitinib and who took the placebo. This is known as a "double-blinded" study. This is done to make sure the results of the research study cannot be unfairly influenced by anyone. Patients were assigned to 1 of 3 treatment groups by chance alone (like the flip of a coin or drawing straws) to receive either abrocitinib at a dose of 100 mg, abrocitinib at a dose of 200 mg, or placebo. Patients had an 80% (4 out of 5) chance of receiving abrocitinib and a 20% (1 out of 5) chance of receiving placebo. This is known as a "randomized" study.



This study used 2 different tests to measure the severity of the patients' AD at the beginning of the study and throughout 12 weeks of treatment. The first test is called the Investigators Global Assessment scale and measures the severity of AD on a 5-point scale (0 being the best and 4 being the worst). The second test is called the Eczema Area and Severity Index, and measures how severe a patient's AD is based on 4 different signs, as well as the amount of skin affected by AD. The difference in each patient's score between the start of the study and after 12 weeks of treatment was used to decide if their AD had improved.

While patients were only in the study for 12 weeks, the entire study took 14 months to complete. The sponsor ran this study at 106 locations in 13 countries in the United States, Poland, Republic of Korea, Japan, Australia, Bulgaria, Canada, Germany, United Kingdom, China, Latvia, Hungary, and Czech Republic. It began 29 June 2018 and ended 13 August 2019. A total of 229 men or boys and 162 women or girls participated. All patients were 12 years of age or older. The average age of patients in this study was 31 years. Approximately 10% of the patients were between the older than 12 and younger than 18 years of age.

Patients were to be treated until the end of the 12-week treatment period. Of the 391 patients who started the study, 52 out of 78 patients (67%) that received placebo finished the study, 137 out of 158 patients (87%) that received 100 mg abrocitinib finished the study, and 141 out of 155 patients (91%) that received 200 mg abrocitinib finished the study. Some patients did not finish the study because 26 out of 78 patients (33%) on placebo, 21 out of 158 patients (13%) on 100 mg abrocitinib, and 14 out of 155 patients (9%) on 200 mg abrocitinib left before the study was over by their choice or a doctor decided it was best for a patient to stop the study.

When the study ended in August 2019, 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?

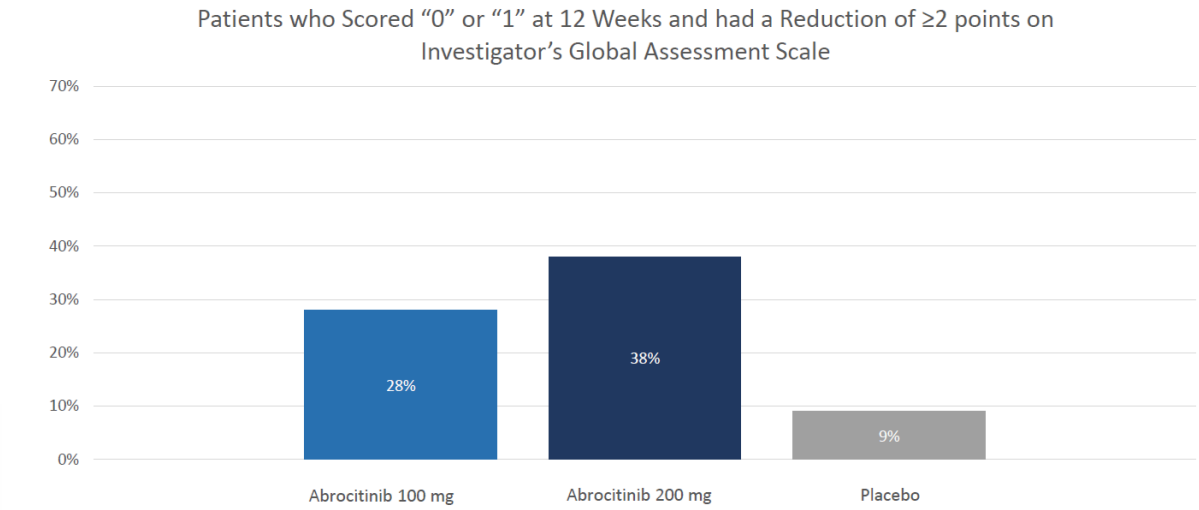
Were patients who took abrocitinib more likely to have their AD improve compared to patients who took placebo?

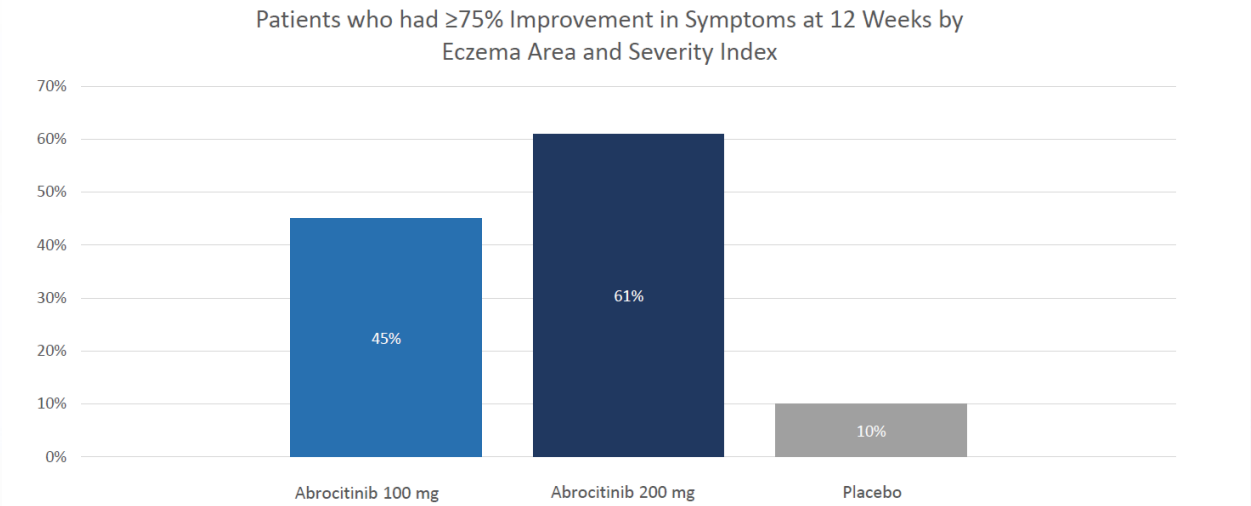
In this study, more patients in the abrocitinib 100 mg or 200 mg treatment groups had their AD improve compared to the placebo group.

When the change in severity of AD was measured using the Investigator's Global Assessment scale, 44 out of 155 evaluated patients (28%) in the abrocitinib 100 mg treatment group and 59 out of 155 patients (38%) in the abrocitinib 200 mg treatment group had their AD improve to 'clear' or 'almost clear' (score of 0 or 1) and had an improvement of 2 points or more in their AD after 12 weeks. In comparison, 7 out of 77 patients (9%) in the placebo group had their AD improve to 'clear' or 'almost clear' after 12 weeks.

When the change in severity of AD was measured using the Eczema Area and Severity Index, 69 out of 155 patients (45%) in the abrocitinib 100 mg treatment group and 94 out of 154 patients (61%) in the abrocitinib 200 mg treatment group had their AD improve by at least 75% after 12 weeks. In comparison, 8 out of 77 patients (10%) in the placebo group had their AD improve by at least 75% after 12 weeks.

These results are also shown in the graphs below.





Based on these results, the researchers determined that the results are not likely due to chance. Abrocitinib may be an option for treating AD in adults and in children aged 12 years and older.

This does not mean that everyone in this study had these results. Other studies may produce different results, as well. These are just some of the main findings of the study, and more information may be available at the websites listed at the end of this summary.

WHAT MEDICAL PROBLEMS DID PATIENTS 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 the side effects of an experimental drug might be.

All 391 patients in this study had at least 1 medical problem. A total of 10 out of 78 patients (13%) who took placebo, 6 out of 158 patients (4%) who took abrocitinib 100 mg, and 5 out of 155 patients (3%) who took abrocitinib 200 mg left the study because of medical problems. The most common medical problems are listed below.

Most Common Medical Problems (Reported by 2% or More of Patients)

Medical Problem	Placebo (78 Patients Treated)	Abrocitinib 100 mg (158 Patients Treated)	Abrocitinib 200 mg (155 Patients Treated)
Low platelet (small particles in the blood that help with clotting) count	0	0	5 (3%)
Stomach pain	0	2 (1%)	6 (4%)
Loose stools	3 (4%)	2 (1%)	3 (2%)
Nausea	2 (3%)	12 (8%)	22 (14%)
Vomiting	1 (1%)	2 (1%)	8 (5%)
Fever	0	4 (3%)	1 (1%)

Infection of one or more of the pockets from which hair grows (follicles)	2 (3%)	0	5 (3%)
Herpes simplex (virus infections causing contagious sores around mouth or on genitals)	1 (1%)	3 (2%)	6 (4%)
Common cold	5 (6%)	20 (13%)	12 (8%)
(Oral herpes) Cold sores	2 (3%)	2 (1%)	2 (1%)
Sinus infection (inflammation of the spaces inside the nose and head)	2 (3%)	3 (2%)	0
Nose and throat infection	3 (4%)	14 (9%)	5 (3%)
Muscle protein (creatine phosphokinase) increased in the blood	2 (3%)	3 (2%)	5 (3%)
Headache	2 (3%)	9 (6%)	12 (8%)
Cough	2 (3%)	4 (3%)	1 (1%)
Acne	0	2 (1%)	9 (6%)
Atopic dermatitis	12 (15%)	9 (6%)	6 (4%)
Skin rash caused by allergic reaction	2 (3%)	1 (1%)	1 (1%)

WERE THERE ANY SERIOUS MEDICAL PROBLEMS?

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

Eight patients had serious medical problems as shown in the below table. One out of 78 patients (1%) in the placebo group, 5 out of 158 patients (3%) in the abrocitinib 100 mg group, and 2 out of 155 patients (1%) in the abrocitinib 200 mg group had serious medical problems. Six patients each had 1 serious medical problem and 2 patients had 2 serious medical problems each. There was 1 patient who died during the study. The researchers assessed that the study medication did not cause the death and that the patient passed away due to other medical problems.

Serious Medical Problems (Reported by 1 or More Patients)			
Serious Medical Problem	Placebo (78 Patients Treated)	Abrocitinib 100 mg (158 Patients Treated)	Abrocitinib 200 mg (155 Patients Treated)
Sudden death	0	1 (1%)	0
Severe, life-threatening allergic reaction	0	0	1 (1%)
Eczema herpeticum (virus infection of the skin that causes painful rash)	1 (1%)	0	0
Herpangina (virus infection that cause sores in mouth and throat)	0	1 (1%)	0
Bone infection	0	1 (1%)	0
Lung infection	0	1 (1%)	0

Infection of the bloodstream caused by Staphylococcus bacteria (type of germ found on skin or in the nose)	**0**	**1 (1%)**	**0**
Staphylococcal infection (infection caused by Staphylococcus bacteria)	**1 (1%)**	**0**	**0**
Broken hip	**0**	**0**	**1 (1%)**
Atopic dermatitis	**0**	**1 (1%)**	**0**

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.

For more details on this study protocol, please visit:

www.clinicaltrials.gov	Use the study identifier **NCT03575871**
www.clinicaltrialsregister.eu	Use the study identifier **2018-001136-21**

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

Again, **thank you** for volunteering. We do research to try to find the best ways to help patients, and you helped us to do that!