What Is the Longer-Term Safety of Abrocitinib, a Medicine That Is Being Developed to Treat People With Moderate-to-Severe Atopic Dermatitis?

THE FULL TITLE OF THIS ARTICLE IS:

Integrated Safety Analysis of Abrocitinib for the Treatment of Moderate-to-Severe Atopic Dermatitis From the Phase II and Phase III Clinical Trial Program

More information can be found in the full scientific article of this study.

Researchers: Eric L. Simpson, Jonathan I. Silverberg, Audrey Nosbaum, Kevin L. Winthrop, Emma Guttman-Yassky, Karin M. Hoffmeister, Alexander Egeberg, Hernan Valdez, Min Zhang, Saleem A. Farooqui, William Romero, Andrew J. Thorpe, Ricardo Rojo, Susan Johnson

Date of Summary June 2021 | **Data Cutoff** April 22, 2020

- These studies were sponsored by Pfizer Inc
- Abrocitinib is not approved to treat the condition that is discussed in this summary
- This summary reports the combined results of 6 studies (NCT02780167, NCT03349060, NCT03575871, NCT03720470, NCT03627767, NCT03422822). The results of the individual studies may vary from the combined study results

WHAT IS ATOPIC DERMATITIS (AD)?

- AD is a chronic inflammatory skin disease and the most common type of eczema
- People with AD have bothersome itching, skin pain, and skin infections and have visible affected skin patches
- These problems can lead to poor sleep, social anxiety, reduced ability to work, and poor quality of life

HOW DO YOU SAY...?

Abrocitinib: <Ahb-roh-SIT-ih-nib>

Atopic dermatitis: <ey-TOP-ik dur-muh-TAHY-tis>

Eczema: <EG-zuh-muh>

Herpes simplex: <HUR-peez SIM-pleks>

Eczema herpeticum: <EG-zuh-muh hur-PET-ih-kuhm>

WHAT IS ABROCITINIB?

Abrocitinib is being investigated as a treatment for moderate-to-severe AD in people for whom medicines applied to the skin (for example, medicated creams and ointments) did not work well. It is taken by mouth in the form of a tablet once a day

- Abrocitinib blocks the inflammation that occurs in AD
- Researchers wanted to know how safe abrocitinib would be when taken for a longer period of time because people with AD might need to take the drug for a long time

WHAT DID THIS ARTICLE LOOK AT?

- Researchers have already finished several clinical studies that tested the safety and effectiveness of abrocitinib in people with AD
- This article combines the information about safety from 6 of these studies
- Participants in these studies were given 1 of 3 possible doses: 200 mg abrocitinib, 100 mg abrocitinib, or pills that look the same as the study medication but do not contain any drug (known as a placebo)

Two Groups of Study Participants Were Analyzed

Short-Term Group That Was Placebo Controlled

This group included people who took

200 mg abrocitinib **OR** 100 mg abrocitinib **OR** Placebo

With this group, researchers compared the safety of the study medication with the safety of placebo. Participants were observed for 12 to 16 weeks

Longer-Term Group That Was Not Placebo Controlled

This group included people who took either

200 mg abrocitinib **OR** 100 mg abrocitinib

With this group, researchers assessed the safety of longer-term treatment with the study medication and compared the safety of 200 mg with the safety of 100 mg

Researchers recorded any new health problems that were reported by study participants since taking the medicine. These are called adverse events. Adverse events may or may not be caused by the study medication

WHO PARTICIPATED IN THESE ANALYSES?

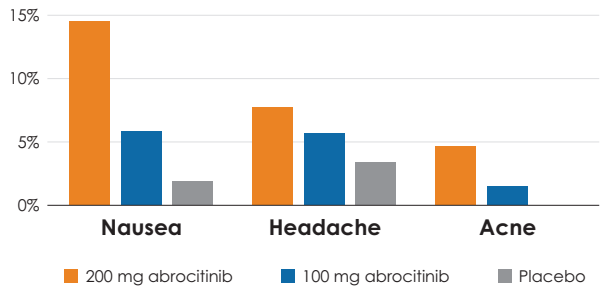
People at least 12 years old who had been diagnosed with moderate-to-severe AD at least 1 year previously participated in the studies. Two of the 6 studies in the analysis included only people who were at least 18 years old. These people could participate only if they had not had a good result from other medication, including pills, injections, or medicine applied to skin

WHAT DID THESE ANALYSES FIND?

Short-Term Group That Was Placebo Controlled (up to 4 months; 710 females and 830 males)

- People who were given abrocitinib were more likely to report nausea, headache, and acne than people who did not take abrocitinib and took placebo instead (**Figure**). These adverse events were typically mild or moderate and did not require the participant to stop taking the study medicine
- Herpes simplex infection was more common in people taking abrocitinib (about 4 out of 100 participants for 200 mg and about 3 out of 100 participants for 100 mg) than in people who took placebo (about 2 out of 100 participants)

Figure. Percentage of Study Participants Reporting Nausea, Headache, or Acne



Longer-Term Group That Was Not Placebo Controlled (up to about 2 years; 1303 females and 1553 males)

- On average, participants took abrocitinib for 6 or more months
- Serious infections, such as pneumonia, occurred rarely (in about 2 out of 1000 participants or fewer depending on the type of infection). People taking either dose of abrocitinib had a similar chance of getting a serious infection
- In the longer-term group, the chance of having a herpes simplex infection was similar with both doses of drug (about 6 out of 100 participants). Participants were more likely to have this problem if they had previously had herpes simplex or a skin infection known as eczema herpeticum
- Some people also reported an infection called herpes zoster, or shingles (13 out of 885 for those who took 100 mg abrocitinib and 44 out of 1971 for those who took 200 mg abrocitinib). The chance of getting this infection was greater for people who were taking the higher dose of abrocitinib
- Of the 2856 people taking the study medication, 7 had nonmelanoma skin cancer, 3 had other cancers, and 3 had heart problems during this study. Because only a few patients got cancer in this study, it is difficult to know whether or not the cancers were related to abrocitinib treatment
- 5 out of 2856 people in the longer-term group experienced blood clots in the veins (called venous thromboembolism); all 5 of these people took 200 mg abrocitinib
- The number of platelets, which are in the blood and are needed for normal blood clotting, decreased for some people around week 4. Few participants (2 out of 2718) needed to stop taking the study medication because of their platelet numbers decreasing, and the decrease in platelets was brief
- Some people experienced a decrease in the number of white blood cells. A small number of people (4 out of 2832) needed to stop taking the study medication and leave the study because their white blood cell count decreased
- Changes to the number of platelets and white blood cells were smaller in younger people

WHAT DOES IT MEAN?

Herpes simplex is a virus that causes lesions or blisters on the body, such as cold sores and genital herpes

Herpes zoster, or shingles, is a viral infection caused by the reactivation of the varicella-zoster virus, the same virus that causes varicella (chickenpox)

Eczema herpeticum is a rare infection caused by herpesvirus

WHAT ARE THE MAIN CONCLUSIONS/IMPLICATIONS OF THE ANALYSIS?

- This analysis studied the longer-term safety of abrocitinib for the treatment of moderate-to-severe AD. Most adverse events were mild and manageable
- Most people who experienced adverse events did not have to stop taking abrocitinib
- Nausea may be prevented by taking abrocitinib with food
- Being up to date with all vaccinations, including the herpes zoster vaccine, monitoring blood test results, and selecting the most appropriate dose (ie, start with 100 mg abrocitinib in people with the highest risk factors for adverse events) may help to further improve safety for people taking abrocitinib

WHERE CAN I FIND MORE INFORMATION?

The full scientific article of this study can be accessed through the *American Journal of Clinical Dermatology* website at

www.springer.com/journal/40257

https://doi.org/10.1007/s40257-021-00618-3

For more information on clinical studies in general, please visit

www.clinicaltrials.gov/ct2/about-studies/learn

The 6 clinical trials analyzed in this study are

NCT02780167	NCT03575871	NCT03627767
NCT03349060	NCT03720470	NCT03422822

More information on these studies can be found by entering the study number into the search field at

www.ClinicalTrials.gov

ACKNOWLEDGMENTS

Pfizer thanks all the people who took part in these studies.

Editorial/medical writing support under the guidance of the authors was provided by Marianna Johnson, PhD, at ApotheCom, San Francisco, CA, USA, and was funded by Pfizer Inc., New York, NY, USA, in accordance with Good Publication Practice (GPP3) guidelines (*Ann Intern Med.* 2015;163:461-464).