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: PF-06826647

Protocol Number: C2501004

Dates of Study: 27 June 2019 to 26 November 2020

Title of this Study: A Study to Evaluate Safety and Efficacy of PF-06826647 For Moderate To Severe Plaque Psoriasis

[A Phase 2, Randomized, Double Blind, Placebo-Controlled, Study to Evaluate the Safety and Efficacy of PF-06826647 in Participants With Moderate to Severe Plaque Psoriasis]

Date(s) of this Report: 16 December 2021

– 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 moderate to severe plaque psoriasis?

Moderate to severe plaque psoriasis is a skin disease characterized by red, scaly, raised patches (plaques) that may itch or burn. Moderate to severe plaque psoriasis can greatly affect the quality of life for patients.

In clinical trials, psoriasis is measured using a tool called Psoriasis Area and Severity Index (PASI). PASI measures plaque psoriasis using the following items:

- Amount of the body (body surface area [BSA]) that has patches (plaques)
- Redness of patches
- Thickness of patches
- Level (degree) of scaling (extra flaky skin)

What is PF-06826647?

The study medication, PF-06826647, is a medication that researchers think may help with moderate to severe plaque psoriasis. PF-06826647 blocks a small protein (called tyrosine kinase 2; TYK2) that may cause inflammation and skin patches. When there are too many TYK2 proteins, inflammation and skin patches develop, as seen in psoriasis.

What was the purpose of this study?

- The primary purpose of this study was to compare the efficacy of multiple dose levels of PF-06826647 versus placebo. Efficacy means how well a drug improves a disease or condition. This study measured the proportion (how many out of the total) of participants with moderate to severe plaque psoriasis who had a reduction in their patches by 90% (90 out of 100) from the beginning of the study to Week 16. This measurement is called PASI90 (that means 90% or more PASI score reduction) for this study.

- This study compared the effects of the study drug, PF-06826647, or a placebo to find out which improves moderate to severe plaque psoriasis.
- Other purposes of this study were to provide additional safety and pharmacokinetic (PK) data. PK data means what amount of PF-06826647 was in the blood at various times.
- Previous studies of PF-06826647 showed adequate safety and improvement of plaque psoriasis to support progression into additional clinical trials requiring longer term therapy. This study explored whether an oral tablet containing PF-06826647 improves the signs and symptoms of moderate to severe psoriasis.
- A placebo was used as the comparator to the study drug. A placebo does not have any medicine in it, but it looks just like the study medicine.

What happened during the study?

How was the study done?

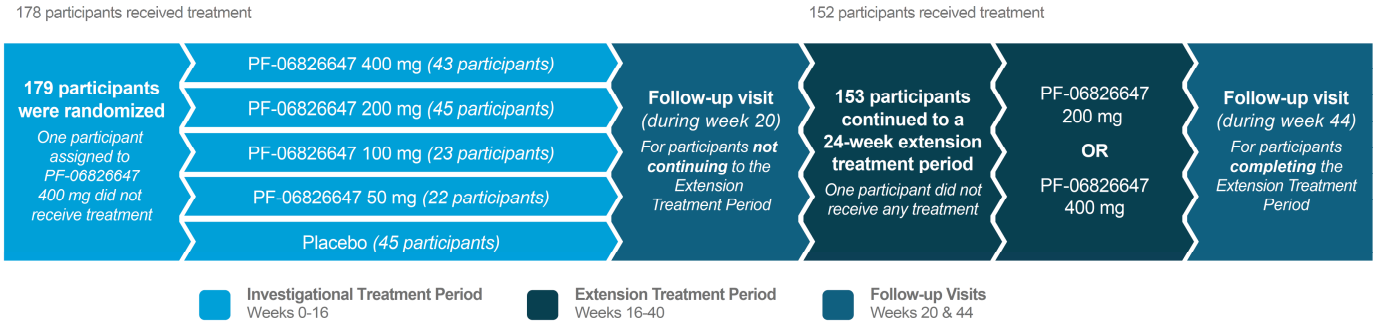
Researchers tested PF-06826647 in groups of study participants during 2 periods of time: an Investigational Treatment Period (Weeks 0-16) and an Extension Treatment Period (Weeks 16-40).

- Participants were randomized to receive placebo or 1 of 4 doses of study medication (PF-06826647, oral daily dose of 50 mg, 100 mg, 200 mg, or 400 mg) during the Investigational Treatment Period for up to 16 weeks. Randomization means that participants were assigned to a treatment group by chance. Twice as many participants were assigned to the placebo, PF-06826647 200 mg, or PF-06826647 400 mg groups compared to the PF-06826647 50 mg or PF-06826647 100 mg groups.
- During the Investigational Treatment Period, the study participants and researchers did not know who took PF-06826647 or who took the placebo. This is known as a "blinded" study. Study participants were assigned to each group by chance alone. The treatment doses in the Extension Treatment Period were also randomized and blinded.

- All participants completing the 16-week Investigational Treatment Period and who were able to continue to the 24-week Extension Treatment Period (which was from Week 16 to Week 40) received oral daily doses of PF-06826647 (either 200 mg or 400 mg). There was no placebo in the Extension Treatment Period.
- The participants continuing into the Extension Treatment Period who were originally assigned to the PF-06826647 200 mg and PF-06826647 400 mg treatment groups continued to receive their same doses.
- Participants who received placebo, PF-06826647 50 mg, or PF-06826647 100 mg in the Investigational Treatment Period were randomly assigned to receive either PF-06826647 200 mg or PF-06826647 400 mg during the Extension Treatment Period.

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

Study Design



Where did this study take place?

The Sponsor ran this study at 36 locations in 4 countries in North America, Europe, and Asia. The study locations were in Canada (7 locations), Japan (6 locations), Poland (6 locations), and the United States (17 locations).

When did this study take place?

It began on 27 June 2019 and ended on 26 November 2020.

Who participated in this study?

The study included participants who were adults at least 18 years old, were diagnosed with moderate to severe plaque psoriasis for at least 6 months, and had stopped other psoriasis treatments.

- A total of 122 men participated (69% of participants)
- A total of 56 women participated (31% of participants)
- All participants were between the ages of 18 years old and 72 years old

Participants were to be treated in the Investigational Treatment Period until Week 16. Of the 179 participants who started the study, 153 participants (85%) finished the Investigational Treatment Period. One (1) participant of the 179 participants who started the study was not treated and is not counted in the number who were treated; 178 participants were treated in the Investigational Treatment Period.

25 participants (14%) did not finish the Investigational Treatment Period because:

- 8 participants (4%) had a medical problem
- 3 participants (2%) left before the study was over for other reasons
- 1 participant (1%) did not respond to the study medication
- 1 participant (1%) was lost to follow-up
- 1 participant (1%) had an unplanned change to the study design
- 11 participants (6%) left before the study was over by their choice or a doctor decided it was best for a participant to stop being in the study.

A total of 153 participants entered the Extension Treatment Period (Week 16 to Week 40). A total of 152 of these participants were treated in the Extension Treatment Period, and 130 (85%) participants completed the Extension Treatment Period.

23 participants (13%) did not finish the Extension Treatment Period because:

- 8 participants (5%) had a medical problem
- 1 participant (1%) was lost to follow-up
- 7 participants (4%) left before the study was over by their choice
- 7 participants (4%) left before the study was over for other reasons

How long did the study last?

Study participants were in the study for 16 weeks during the Investigational Treatment Period and 24 weeks during the Extension Treatment Period for a total of 40 weeks, plus a screening period of up to 6 weeks and a follow-up period of 4 weeks. The entire study took about 1 ½ years to complete.

- The study was completed as planned, including during the Covid-19 pandemic period.
- 7 participants left the study during the Covid-19 pandemic period (2 in the Investigational Treatment Period and 5 during the Extension Treatment Period); the data from these 7 participants were not analyzed for this report.
- 5 participants reported missed doses or delayed doses due to the pandemic.

When the study ended in November 2020, 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?

What proportion of participants with moderate to severe plaque psoriasis taking PF-06826647 achieved PASI90, compared to participants taking placebo?

PASI90 for this study means a response greater than or equal to a 90% (90 out of 100) reduction in the PASI score from the beginning of the study compared with PASI90 at Week 16.

Did the study medication help participants achieve PASI90 compared to placebo at Week 16?

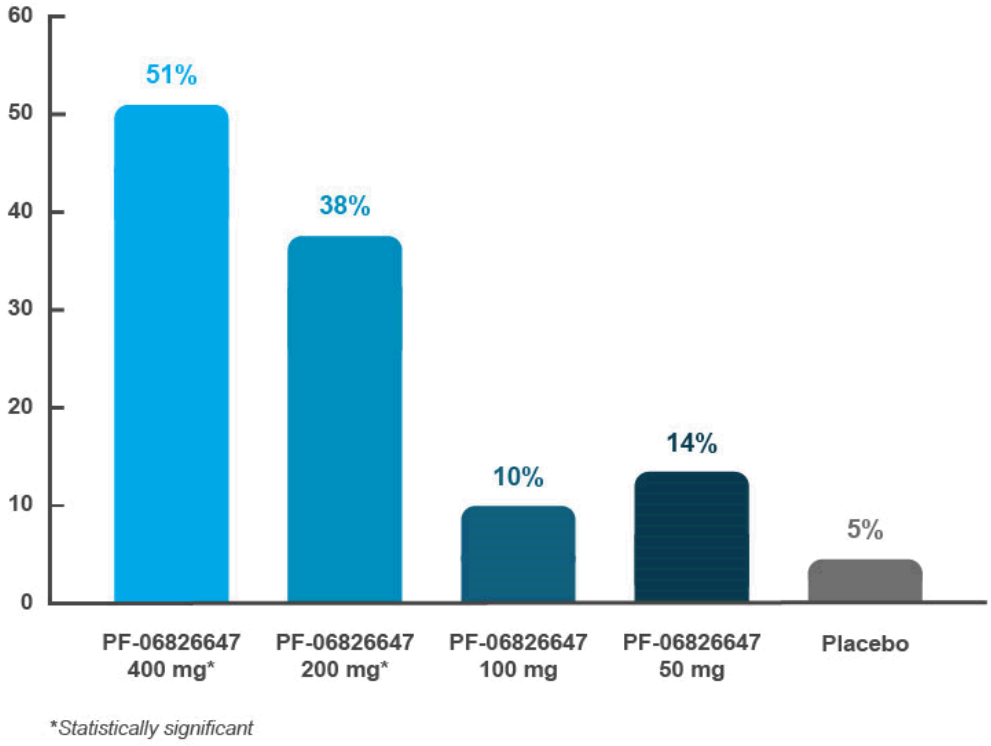
Yes. The results are described below and shown in the graph on the next page.

- 21 participants out of 41 (51%) participants who took PF-06826647 400 mg achieved PASI90 response;
- 17 participants out of 45 (38%) participants who took PF-06826647 200 mg achieved PASI90 response;
- 2 participants out of 21 (10%) participants who took PF-06826647 100 mg achieved PASI90 response;
- 3 participants out of 22 (14%) participants who took PF-06826647 50 mg achieved PASI90 response;
- 2 out of 42 (5%) participants who took placebo achieved PASI90 response.

Based on these results, the researchers have decided that the results for participants taking PF-06826647 400 mg or 200 mg were not likely the result of chance. The study medication at 400 mg or 200 mg doses may help participants with moderate to severe plaque psoriasis achieve PASI90 response.

The results for participants taking PF-06826647 100 mg or 50 mg were similar to placebo and may be the result of chance. This means the study results for participants taking PF-06826647 100 mg or 50 mg did not show that one treatment was better than another at helping participants with moderate to severe plaque psoriasis achieve PASI90 response.

Proportion of Participants Achieving PASI90 Response at Week 16



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.

A total of 109 out of 178 (61%) participants during the Investigational Treatment Period had at least 1 medical problem. A total of 9 participants (5%) left the study during the Investigational Treatment Period because of medical problems. The most common medical problems – those reported by more than 3 participants – are described in the table below:

Below are instructions on how to read Table 1 and Table 2.

Instructions for Understanding Table 1 and Table 2.

- The **1st** column of Table 1 lists medical problems that were commonly reported during the study during the Investigational Treatment Period. All commonly reported medical problems that happened in 3 or more participants are listed.

- The **2nd** column of Table 1 tells how many of the 133 participants taking the study medication, PF-06826647, at all of the doses (50 mg, 100 mg, 200 mg, and 400 mg combined) reported each medical problem. Next to this number is the percentage (%) of the 133 participants taking PF-06826647 at all doses who reported the medical problem.

- The **3rd** column of Table 1 tells how many of the 45 participants taking the placebo reported each medical problem. Next to this number is the percentage (%) of the 45 participants taking the placebo who reported the medical problem.

- Using these instructions for Table 1, in the **2nd** column you can see that 23 out of the 133 (17%) participants taking the PF-06826647 at all doses reported inflammation of the nose and throat. In the **3rd** column, you can see that 6 out of the 45 (13%) participants taking the placebo reported inflammation of the nose and throat.

Table 1. Commonly reported medical problems by study participants - Investigational Treatment Period		
Medical Problem	**PF-06826647 50 mg, 100 mg, 200 mg, 400 mg (133 Participants)**	**Placebo (45 Participants)**
Inflammation of nose and throat	23 out of 133 participants (17%)	6 out of 45 participants (13%)
Infection of nose and throat	12 out of 133 participants (9%)	2 out of 45 participants (4%)
Increased enzyme in heart, brain, and muscle around bones	8 out of 133 participants (6%)	1 out of 45 participants (2%)
Increased blood pressure (short-term)	11 out of 133 participants (8%)	1 out of 45 participants (2%)
Increased blood pressure (long-term)	7 out of 133 participants (5%)	0 out of 45 participants (0%)

96 participants out of the 152 (63%) participants in the Extension Treatment Period had at least 1 medical problem. A total of 9 participants out of 152 (6%) participants left the study during the Extension Treatment Period because of medical problems. The most common medical problems – those reported by more than 3 participants – are described in the table below.

Table 2. Commonly reported medical problems by study participants - Extension Treatment Period		
Medical Problem	**PF-06826647 200 mg (78 Participants)**	**PF-06826647 400 mg (74 Participants)**
Increased enzyme in heart, brain, and muscle around bones	5 out of 78 participants (6%)	7 out of 74 participants (9%)
Headache	3 out of 78 participants (4%)	5 out of 74 participants (7%)
Increased blood pressure (long-term)	3 out of 78 participants (4%)	6 out of 74 participants (8%)

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. During the Investigational Treatment Period, 2 participants out of 178 participants (1%, or 1 out of 100 participants) had serious medical problems.

- During the Investigational Treatment Period:
  - 1 participant in the PF-06826647 50 mg group had a serious medical problem of temporary, limited hearing loss. Researchers did not think this was related to PF-06826647.
  - 1 participant in the PF-06826647 200 mg group had a serious medical problem of chest pain with increased blood pressure and nervous system symptoms. Researchers thought this was related to PF-06826647.
- No participants in the placebo group had a serious medical problem during the Investigational Treatment Period.
- There were no deaths during the Investigational Treatment Period.

The serious medical problems that happened during the Investigational Treatment Period are listed in the table below.

Below are instructions on how to read Tables 3 and 4.

Instructions for Understanding Table 3 and Table 4.

- The **1st** column of Table 3 lists serious medical problems that were reported during the study during the Investigational Treatment Period. All serious medical problems are listed.
- The **2nd** column in Table 3 tells how many of the 133 participants taking the study medication, PF-06826647, reported a serious medical problem. Next to this number is the percentage (%) of the 133 participants taking the study medication who reported the serious medical problem.
- The **3rd** column in Table 3 tells how many of the 45 participants taking a placebo reported a serious medical problem. Next to this number is the percentage of the 45 participants taking a placebo who reported the serious medical problem.
- Using these instructions for Table 3, you can see that in the 2nd column, 1 participant (1%) out of the 133 participants taking the study medication reported temporary, limited hearing loss. In the 3rd column, a total of 0 participants (0%) out of the 45 participants taking the placebo reported temporary, limited hearing loss.

Table 3. Reported serious medical problems by study participants - Investigational Treatment Period		
Serious Medical Problem	**PF-06826647 (133 Participants)**	**Placebo (45 Participants)**
Temporary, limited hearing loss	1 out of 133 participants (1%)	0 out of 45 participants (0%)
Chest pain with increased blood pressure and nervous system symptoms	1 out of 133 participants (1%)	0 out of 45 participants (0%)

During the Extension Treatment Period, 5 participants out of 152 (3%, or 3 out of 100) had a serious medical problem.

- The serious medical problem that researchers thought was related to the study drug, PF-06826647, was 1 instance of a positive COVID-19 test during the Extension Treatment Period.
- There were no deaths during the Extension Treatment Period.

The serious medical problems that happened during the Extension Treatment Period are listed in the table below.

Table 4. Reported serious medical problems by study participants - Extension Treatment Period

Serious Medical Problem	PF-06826647 200 mg (78 Participants)	PF-06826647 400 mg (74 Participants)
Miscarriage	1 out of 78 participants (1%)	0 out of 74 participants (0%)
COVID-19 positive test	1 out of 78 participants (1%)	1 out of 74 participants (1%)
Almost fainted from dizziness	0 out of 78 participants (0%)	1 out of 74 participants (1%)
Inflammation or infection of organs from germ	0 out of 78 participants (0%)	1 out of 74 participants (1%)
Increased protein in blood after a blood clot	0 out of 78 participants (0%)	1 out of 74 participants (1%)
Chest pain	1 out of 78 participants (1%)	0 out of 74 participants (0%)
Worsening of increased blood pressure	0 out of 78 participants (0%)	1 out of 74 participants (1%)

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 your study protocol, please visit:

www.clinicaltrials.gov	Use the study identifier NCT03895372
www.clinicaltrialsregister.eu	Use the study identifier EUDRACT 2018-004669-16

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

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