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 patients. The results of this study might be different than the results of other studies that the researchers review.

Sponsor: Pfizer Inc.

Medicine Studied: Zavzpret™ (zavegepant, also known as PF-07930207 or BHV-3500)

Protocol Number: C5301003 (BHV3500-113)

Dates of Study: 24 August 2022 to 07 December 2022

Title of this Study: A Study to Compare the Blood Levels of Zavegepant When Taken by Healthy Adults in 4 Different Preparations

[A Phase 1, Open-Label, Randomized, 4-Period, 4-Way Crossover, Comparative Bioavailability Study of Zavegepant (BHV-3500) Oral Formulations Under Fasting Conditions]

Date of this Report: 07 December 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 migraine?

Migraine is a type of headache that can cause severe throbbing pain or sensation. It usually happens on 1 side of the head and often comes with a queasy feeling or nausea, vomiting, and extreme sensitivity to light and sound.

Migraine attacks may happen due to many reasons. It may be because of stress, changes in sleep patterns, and/or changes in the body's hormone levels, among many others.

Migraine attacks can last for hours to days. It can negatively affect the daily lives of people who have it.

What is zavegepant?

In this study, Zavzpret™ (also called zavegepant) came in the form of tablets or capsules. Researchers think that zavegepant may help treat migraine attacks.

What was the purpose of this study?

The purpose of this study was to compare the amount of zavegepant in the blood after participants had taken it orally (by mouth) in 4 different preparations. The participants had not eaten any food or drink other than water for at least 10 hours when they took the study medication.

Participants in this study were healthy volunteers. The study was not meant to test if zavegepant helps to treat migraine attacks.

Researchers wanted to know:

- **What was the amount of zavegepant in the blood of healthy adults after taking it orally in 4 different preparations?**
- **What medical problems did participants have during the study?**

What happened during the study?

How was the study done?

Researchers tested zavegepant to learn how much of it is taken up by the body into the blood when taken orally by participants. Participants received each of the 4 different preparations of zavegepant based on a treatment schedule. The treatments were:

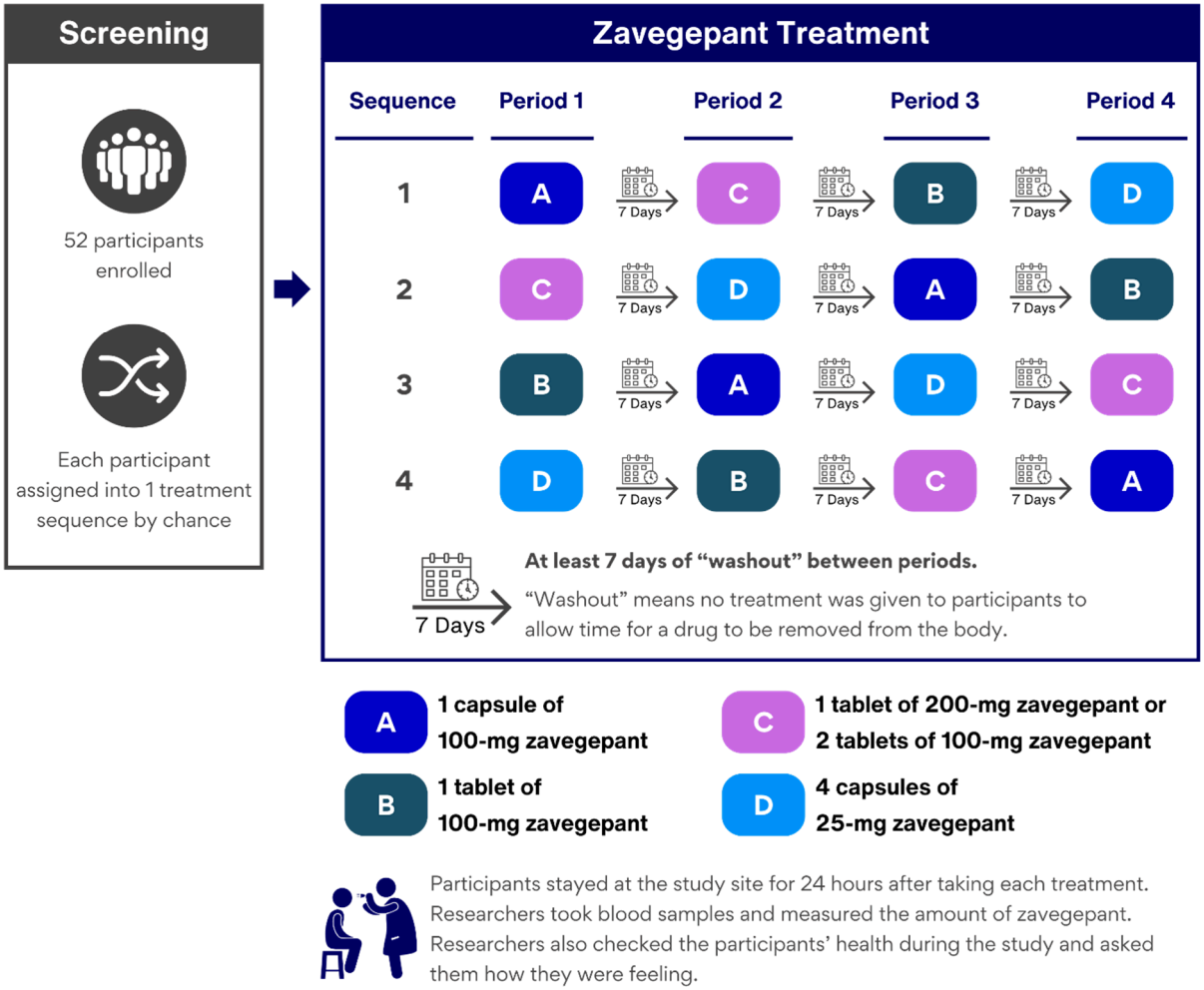
- Treatment A: 1 capsule of 100-mg zavegepant
- Treatment B: 1 tablet of 100-mg zavegepant
- Treatment C: 1 tablet of 200-mg zavegepant or 2 tablets of 100-mg zavegepant
- Treatment D: 4 capsules of 25-mg zavegepant

Researchers took blood samples from participants after they took Treatments A, B, C, and D to check the amount of zavegepant. Researchers then compared the results from the 4 different treatments.

Researchers also checked the participants' health during the study and asked them how they were feeling.

The participants and researchers knew what treatments the participants received. This is known as an “open-label” study. Participants were assigned to each treatment sequence by chance alone. Figure 1 shows what happened in the study.

Figure 1. Overall study design



Where did this study take place?

The Sponsor ran this study at 1 location in the United States.

When did this study take place?

It began on 24 August 2022 and ended on 07 December 2022.

Who participated in this study?

The study included 52 non-smoking, healthy adult participants.

- A total of 33 men participated.
- A total of 19 women participated.
- All participants were between the ages of 22 and 48 years old.

Of the 52 participants who received a study medication:

- 51 participants took Treatment A.
- 51 participants took Treatment B.
- 50 participants took Treatment C.
- 50 participants took Treatment D.

There was 1 participant who did not finish the 4 treatment periods and left the study because of medical problems after only taking Treatment A.

How long did the study last?

Study participants were in the study for up to 6 and a half weeks. The entire study took 3 and a half months to complete.

When the study ended in December 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?

What was the amount of zavegepant in the blood of healthy adults after taking it orally in 4 different preparations?

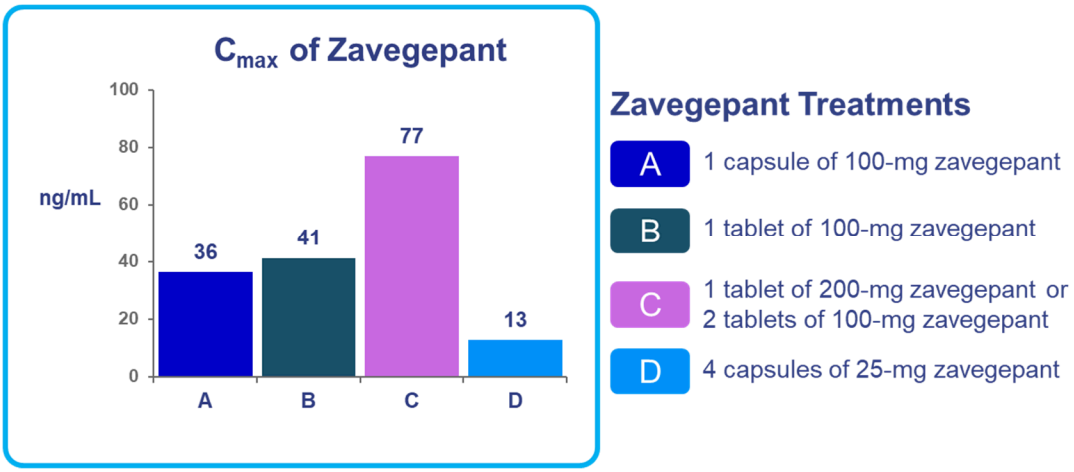
To answer this question, researchers checked the amount of zavegepant in the blood after participants took the treatments. Researchers needed to find out the highest amounts of zavegepant in the blood (also called C_{max}) and the total amount of zavegepant in the blood over time (also called AUC).

The C_{max} was measured in nanograms per milliliter (also called ng/mL). The C_{max} of zavegepant was:

- 36 ng/mL after taking Treatment A.
- 41 ng/mL after taking Treatment B.
- 77 ng/mL after taking Treatment C.
- 13 ng/mL after taking Treatment D.

Figure 2 shows the C_{max} of zavegepant between treatments.

Figure 2. C_{max} of Zavegepant Between Treatments

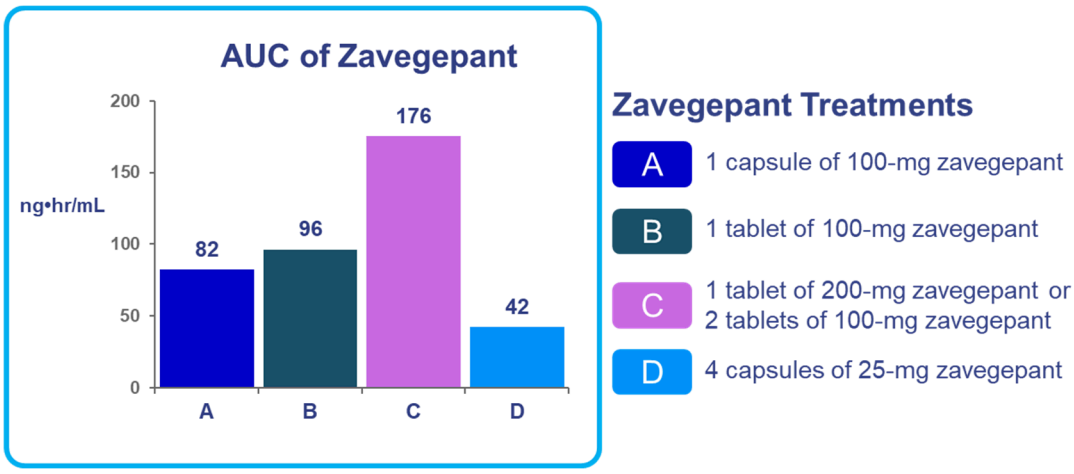


AUC is the total amount of zavegepant in the blood over time. It was measured in nanogram hours per milliliter (also called ng•hr/mL). A higher AUC means that the study medication stays in the body for a longer period. The AUC of zavegepant was:

- 82 ng•hr/mL after 24 hours of taking Treatment A.
- 96 ng•hr/mL after 24 hours of taking Treatment B.
- 176 ng•hr/mL after 24 hours of taking Treatment C.
- 42 ng•hr/mL after 24 hours of taking Treatment D.

Figure 3 shows the AUC of zavegepant between treatments.

Figure 3. AUC of Zavegepant Between Treatments



Treatment C had twice the dose of zavegepant compared to other treatments (Treatments A, B, and D). This resulted in higher C_{max} and AUC of zavegepant in participants who took Treatment C.

Considering the amount of zavegepant received by participants, researchers thought that the differences in C_{max} and AUC between Treatments A, B, and C were as expected. The C_{max} and AUC of zavegepant in Treatment D were lower.

The numbers in tables and graphs are the average of measurements among participants in the same group who took the same treatment.

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 unknown 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.

Researchers reviewed the results of participants' blood tests, vital signs (blood pressure, heart rate, and body temperature), physical examination, and electrocardiogram (ECG). An ECG is used to see if the heart is beating in a healthy way. Researchers found some results that were not normal, but the overall results did not raise any safety concerns.

In total, 11 out of 52 participants (21%) had at least 1 medical problem. The medical problems reported in the study are described in Table 1.

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 reported during the study.
- The **2nd** column tells how many of the 51 participants reported each medical problem after taking Treatment A. Next to this number is the percentage of the 51 participants who reported the medical problem after taking Treatment A.
- The **3rd** column tells how many of the 51 participants reported each medical problem after taking Treatment B. Next to this number is the percentage of the 51 participants who reported the medical problem after taking Treatment B.
- The **4th** column tells how many of the 50 participants reported each medical problem after taking Treatment C. Next to this number is the percentage of the 50 participants who reported the medical problem after taking Treatment C.
- The **5th** column tells how many of the 50 participants reported each medical problem after taking Treatment D. Next to this number is the percentage of the 50 participants who reported the medical problem after taking Treatment D.
- Using these instructions, you can see that:
    - 1 out of 51 participants (2%) had a minor scrape of the skin after taking Treatment A.
    - 0 out of 51 participants (0%) had a minor scrape of the skin after taking Treatment B.

- 2 out of 50 participants (4%) had a minor scrape of the skin after taking Treatment C.
- 1 out of 50 participants (2%) had a minor scrape of the skin after taking Treatment D.

Table 1. Medical problems reported by study participants

Medical Problem	Treatment A (51 Participants)	Treatment B (51 Participants)	Treatment C (50 Participants)	Treatment D (50 Participants)
Minor scrape of the skin	1 out of 51 participants (2%)	0 out of 51 participants (0%)	2 out of 50 participants (4%)	1 out of 50 participants (2%)
Low level of a blood protein "hemoglobin" that helps carry oxygen throughout the body	0 out of 51 participants (0%)	1 out of 51 participants (2%)	0 out of 50 participants (0%)	1 out of 50 participants (2%)
High level of an enzyme in the blood called "alanine aminotransferase" (ALT), which is mainly found in the liver	1 out of 51 participants (2%)	0 out of 51 participants (0%)	0 out of 50 participants (0%)	0 out of 50 participants (0%)

Table 1. Medical problems reported by study participants

Medical Problem	Treatment A (51 Participants)	Treatment B (51 Participants)	Treatment C (50 Participants)	Treatment D (50 Participants)
High level of an enzyme in the blood called "aspartate aminotransferase" (AST), which is mainly found in the liver	1 out of 51 participants (2%)	0 out of 51 participants (0%)	0 out of 50 participants (0%)	0 out of 50 participants (0%)
High level of a chemical in the blood called "bilirubin", which is produced when red blood cells are broken down	1 out of 51 participants (2%)	0 out of 51 participants (0%)	0 out of 50 participants (0%)	0 out of 50 participants (0%)
High level of an enzyme in the blood called "lipase", which is produced by the pancreas	1 out of 51 participants (2%)	0 out of 51 participants (0%)	0 out of 50 participants (0%)	0 out of 50 participants (0%)
Presence of white blood cells in the urine	1 out of 51 participants (2%)	0 out of 51 participants (0%)	0 out of 50 participants (0%)	0 out of 50 participants (0%)

Table 1. Medical problems reported by study participants

Medical Problem	Treatment A (51 Participants)	Treatment B (51 Participants)	Treatment C (50 Participants)	Treatment D (50 Participants)
Dizziness	0 out of 51 participants (0%)	0 out of 51 participants (0%)	1 out of 50 participants (2%)	0 out of 50 participants (0%)
Feeling of almost fainting	0 out of 51 participants (0%)	1 out of 51 participants (2%)	0 out of 50 participants (0%)	0 out of 50 participants (0%)
Fainting	0 out of 51 participants (0%)	0 out of 51 participants (0%)	0 out of 50 participants (0%)	1 out of 50 participants (2%)
Tummy pain	1 out of 51 participants (2%)	0 out of 51 participants (0%)	0 out of 50 participants (0%)	0 out of 50 participants (0%)
Vomiting	1 out of 51 participants (2%)	0 out of 51 participants (0%)	0 out of 50 participants (0%)	0 out of 50 participants (0%)
Pain in the upper tummy	1 out of 51 participants (2%)	0 out of 51 participants (0%)	0 out of 50 participants (0%)	0 out of 50 participants (0%)
Queasy feeling	0 out of 51 participants (0%)	0 out of 51 participants (0%)	1 out of 50 participants (2%)	0 out of 50 participants (0%)
Irritated pancreas	1 out of 51 participants (2%)	0 out of 51 participants (0%)	0 out of 50 participants (0%)	0 out of 50 participants (0%)
Urinary tract infection	1 out of 51 participants (2%)	0 out of 51 participants (0%)	0 out of 50 participants (0%)	0 out of 50 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.

Overall, 1 out of the 52 participants (2%) had serious medical problems after only taking Treatment A. This participant did not finish all 4 treatment periods and left the study because of:

- Serious medical problems of tummy pain and irritated pancreas.
- Non-serious medical problems of high levels of ALT, AST, bilirubin, and lipase in the blood.

Researchers do not believe that these medical problems were related to the study medication.

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.

For more details on your study protocol, please visit:

www.pfizer.com/research/research_clinical_trials/trial_results

Use the protocol number **C5301003 (BHV3500-113)**

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!