

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

**Sponsor:** Pfizer Inc.

Medicine Studied: Minipress® (prazosin hydrochloride)

Protocol Number: A0281006

Dates of Study: 22 September 2021 to 15 February 2022

Title of this Study: A Study to Compare the Amount of Prazosin

Hydrochloride in Participants' Blood After Taking

Capsules Manufactured at Different Sites.

[A 2 Cohort, Single Dose, Open-Label, Randomized, Pivotal Bioequivalence Study to Qualify Manufacturing Site Transfer from Barceloneta to Ascoli for Prazosin Hydrochloride Capsules in Healthy Adult Participants

Under Fasted Conditions.]

Date of this Report: 31 October 2022

# - 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 hypertension?

Hypertension is also known as high blood pressure. Blood pressure is the force of blood pushing against the walls of arteries as it flows through them. Arteries are the blood vessels that carry blood enriched with oxygen from the heart to the rest of the body.

#### What is Prazosin Hydrochloride (Minipress®)?

Prazosin hydrochloride (HCl) (pra-zow-sen hy-dro-chlor-ide) is a capsule that is swallowed that researchers think may help treat hypertension and heart failure. Heart failure affects the pumping action of the heart muscles and means the heart does not work properly. Prazosin HCL is sold as Minipress<sup>®</sup>. Currently prazosin HCl capsules are manufactured by Pfizer at Barceloneta in Puerto Rico. Pfizer wants to transfer manufacture to a new site in Ascoli, Italy.

#### What was the purpose of this study?

The purpose of this study was to compare the amount of prazosin HCl in the blood of participants after they took capsules containing the same dose of prazosin HCl manufactured at the different Pfizer sites (Barceloneta and Ascoli). After prazosin HCl was swallowed, prazosin HCl entered the body and moved through the body.

#### Researchers wanted to know:

- How did the amount of prazosin HCl in the blood change when participants took the same doses of prazosin HCl manufactured at the Pfizer site in Barceloneta and Ascoli?
- What medical problems did participants have during the study?





# What happened during the study?

#### How was the study done?

Researchers tested the same doses of prazosin HCl on 2 groups of healthy adult participants to compare the amount of prazosin HCl in the participants' blood after they took capsules manufactured at the different Pfizer sites (Barceloneta and Ascoli).

Participants were split into two groups, Group 1 and Group 2. Both groups were further split into the subgroups shown in Figures 1a and 1b on pages 4 and 5. Participants were assigned to each group by chance alone. Treatments included prazosin HCl 2 mg and 5 mg capsules, manufactured in Barceloneta and prazosin HCl 1 mg, 2 mg and 5 mg capsules, manufactured in Ascoli. The way the treatments were given to participants in the different subgroups and the study design are shown in more detail in Figures 1a and 1b on pages 4 and 5.



Study Design for Group 1 Figure 1a

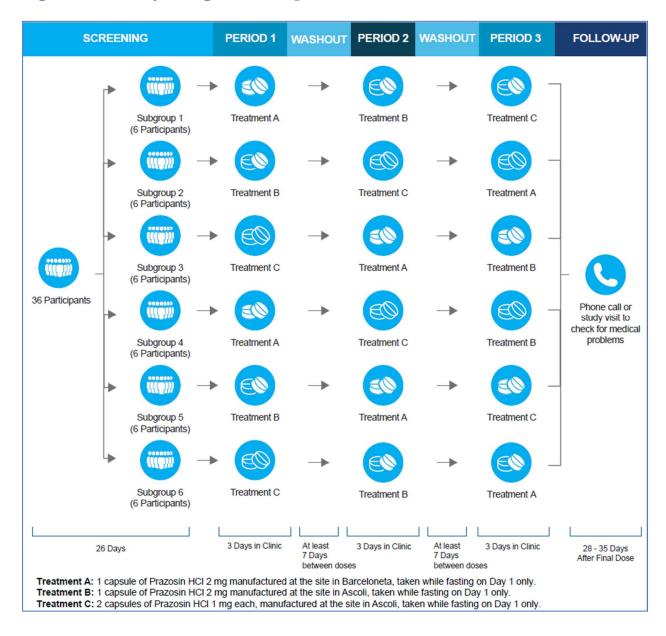
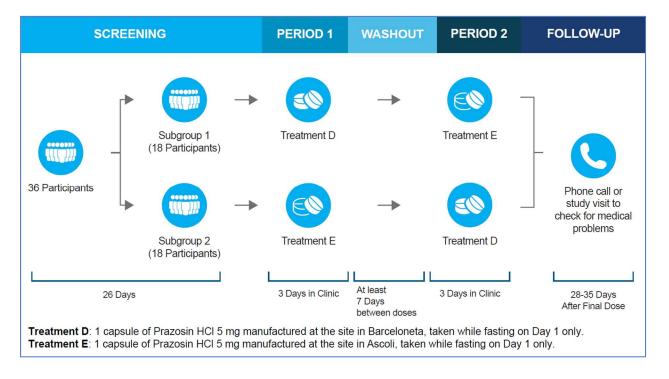




Figure 1b Study Design for Group 2



Researchers took samples of blood from participants during the study and measured the amount of prazosin HCl in these blood samples. Researchers also checked the participants' health during the study and asked them how they were feeling.

#### Where did this study take place?

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

#### When did this study take place?

It began 22 September 2021 and ended 15 February 2022.

#### Who participated in this study?

Both groups in the study included healthy adult participants.

- A total of 24 men and 12 women participated in Group 1.
- A total of 20 men and 16 women participated in Group 2.





• All participants in both groups were between the ages of 18 and 55.

There was a total of 72 participants in the study, 36 participants in Group 1 and 36 participants in Group 2. Thirty-one (31) out of 36 participants (86%) who started treatment in Group 1 received all 3 treatments. Thirty-four (34) out of 36 participants (94%) received Treatment A, 33 out of 36 participants (92%) received Treatment B and 33 out of 36 participants (92%) received Treatment C. Of the 5 participants in Group 1 who did not finish treatment 1 participant did not finish treatment due to death, 3 participants left by choice and 1 participant was lost to follow-up. All 36 participants entered the follow-up stage of the study. Six (6) out of these 36 participants (17%) did not finish follow-up. One (1) of these 6 participants did not finish follow-up due to death, 3 participants left by choice and 2 participants were lost to follow-up.

Thirty-one (31) out of 36 participants (86%) who started treatment in Group 2 received both treatments. Thirty-three (33) out of the 36 participants (92%) received Treatment D and 34 out of 36 participants (94%) received Treatment E. All 5 participants who did not finish treatment in Group 2 left by choice. All 36 participants entered the follow-up stage of the study. Five (5) out of these 36 participants (14%) did not finish follow-up because they left by choice.

#### How long did the study last?

Study participants were in the study for 11 weeks. The entire study took almost 5 months to complete.

When the study ended in February 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?

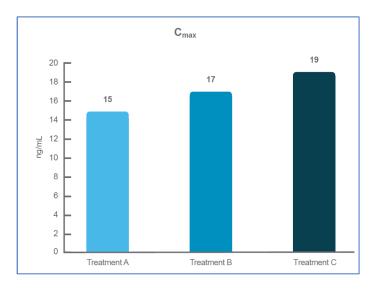
How did the amount of prazosin HCl in the blood change when participants took the same doses of prazosin HCl manufactured at the Pfizer sites in Barceloneta and Ascoli?

#### Group 1

What was the highest level of prazosin HCl in the blood after participants took Treatments A, B and C?

• The highest level of drug in the blood was measured in nanograms per milliliter, also called ng/mL. Figure 2 shows the highest level of prazosin HCl in the blood after participants took Treatments A (15 ng/mL), B (17 ng/mL) and C (19 ng/mL). This is known as the maximum concentration that the drug reaches in the body (C<sub>max</sub>). Researchers considered the difference in the results meaningful.

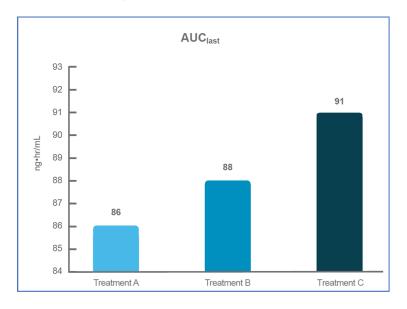
Figure 2  $C_{max}$  for Prazosin HCl after Participants took Treatments A, B and C.





• The total amount of prazosin HCl in the blood from when prazosin HCl was taken to the time when the lowest amount was detected in the blood was measured in nanograms per milliliter per hour, also called ng•hr/mL. This is known as Area Under the Curve Up to the Last Measurable Concentration (AUC<sub>last</sub>). AUC<sub>last</sub> was 86 ng•hr/mL after Treatment A, 88 ng•hr/mL after Treatment B and 91 ng•hr/mL after Treatment C, as shown in Figure 3. Researchers considered the difference in the results as minor.

Figure 3 AUC<sub>last</sub> for Prazosin HCl after Participants Took Treatments A, B and C.



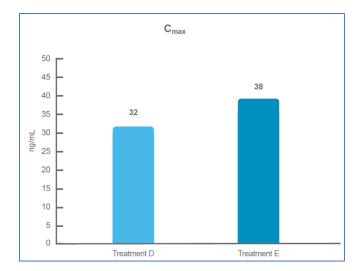
#### Group 2

What was the highest level of prazosin HCl in the blood after participants took Treatments D and E?

• Figure 4 shows the highest level of prazosin HCl in the blood after participants took Treatments D (32 ng/mL) and E (38 ng/mL). This is known as C<sub>max</sub>. Researchers considered the difference in the results meaningful.

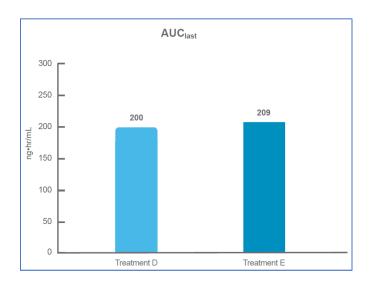


Figure 4 C<sub>max</sub> for Prazosin HCl after Participants Took Treatments D and E.



The total amount of prazosin HCl in the blood from when prazosin HCl was taken to the time when the lowest amount was detected in the blood was 200 ng•hr/mL after Treatment D and 209 ng•hr/mL after Treatment E, as shown in Figure 5. Researchers considered the difference in the results as minor.

AUClast for Prazosin HCl after Participants Took Figure 5 Treatments D and E.





Based on the overall results, the researchers have decided that the results are not likely the result of chance. The site at which prazosin HCl is manufactured (Barceloneta or Ascoli) may affect the way the body handles prazosin HCl.

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.

In Group 1, 11 out of 34 (32%) participants who took Treatment A, 5 out of 33 (15%) participants who took Treatment B and 6 out of 33 (18%) participants who took Treatment C, had at least 1 medical problem. One (1) participant from Group 1 left the study due to their death in a road traffic accident. In Group 2, 17 out of 33 (52%) participants who took Treatment D and 18 out of 34 (53%) participants who took Treatment E, had at least 1 medical problem. No participants from Group 2 left the study because of medical problems. The most common medical problems – those reported by more than 5% of participants in each Group – are described below.

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

Instructions for Understanding Table 1.





- The **1st** column of Table 1 lists medical problems that were commonly reported in Group 1 during the study. All medical problems reported by more than 5% of participants are listed.
- The **2nd** column tells how many of the 34 participants taking Treatment A reported each medical problem. Next to this number is the percentage of the 34 participants taking Treatment A who reported the medical problem.
- The **3rd** column tells how many of the 33 participants taking Treatment B reported each medical problem. Next to this number is the percentage of the 33 participants taking Treatment B who reported the medical problem.
- The **4th** column tells how many of the 33 participants taking Treatment C reported each medical problem. Next to this number is the percentage of the 33 participants taking Treatment C who reported the medical problem.
- Using these instructions, you can see that 2 out of the 34 participants (6%) taking Treatment A, 1 out of 33 participants (3%) taking Treatment B, and 1 out of 33 participants (3%) reported feeling like about to vomit.

#### **Instructions for Understanding Table 2**

- The **1st** column of Table 2 lists medical problems that were commonly reported in Group 2 during the study. All medical problems reported by more than 5% of participants are listed.
- The **2nd** column tells how many of the 33 participants taking Treatment D reported each medical problem. Next to this number is the percentage of the 33 participants taking Treatment D who reported the medical problem.





- The 3rd column tells how many of the 34 participants taking Treatment E reported each medical problem. Next to this number is the percentage of the 34 participants taking Treatment E who reported the medical problem.
- Using these instructions, you can see that 1 out of the 33 participants (3%) taking Treatment D and 4 out of 34 participants (12%) reported heartbeats faster than 100 beats per minute.



## Table 1. Commonly reported medical problems by study participants in Group 1

Medical Problem	Prazosin HCl 1 capsule 2 mg (Barceloneta) Treatment A (34 Participants)	Prazosin HCl 1 capsule 2 mg (Ascoli) Treatment B (33 Participants)	Prazosin HCl 2 capsules 1 mg each (Ascoli) Treatment C (33 Participants)
Feeling like about to vomit	2 out of 34 participants (6%)	1 out of 33 participants (3%)	1 out of 33 participants (3%)
Headache	2 out of 34 participants (6%)	2 out of 33 participants (6%)	2 out of 33 participants (6%)
Low blood pressure that happens after standing up from sitting or lying down	4 out of 34 participants (12%)	1 out of 33 participants (3%)	2 out of 33 participants (6%)



Table 2. Commonly reported	medical problems by study
participants in Group 2	

Medical Problem	Prazosin HCl 1 capsule 5 mg (Barceloneta) Treatment D (33 Participants)	Prazosin HCl 1 capsule 5 mg (Ascoli) Treatment E (34 Participants)
Heartbeats faster than 100 beats per minute	1 out of 33 participants (3%)	4 out of 34 participants (12%)
Feeling like about to vomit	7 out of 33 participants (21%)	9 out of 34 participants (26%)
Dizziness	9 out of 33 participants (27%)	7 out of 34 participants (21%)
Headache	3 out of 33 participants (9%)	5 out of 34 participants (15%)
Feeling sleepy	0	2 out of 34 participants (6%)
Low blood pressure that happens after standing up from sitting or lying down	3 out of 33 participants (9%)	2 out of 34 participants (6%)



# 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) out of 36 participants (3%) in Group 1 died in a road traffic accident. Researchers do not believe this death was related to prazosin HCl. There were no other serious medical problems in this study.

No participants in Group 2 died or had serious medical problems.





### 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:

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

www.clinicaltrials.gov Use the study identifier **NCT04967443** 

www.pfizer.com/research/ Use the protocol number A0281006

research\_clinical\_trials/trial\_results

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!

