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(s) Studied: Bosutinib/PF-05208763

Protocol Number: B1871063

Dates of Study: 13 August 2021 to 27 January 2022

Title of this Study: Bioavailability of Bosutinib Administered as Capsule Contents Mixed With Applesauce or Yogurt Compared to Intact Capsules Under Fed Condition [A Phase 1, Open-Label, Randomized, 3-Period, 6-Sequence, Crossover Study to Evaluate the Bioavailability of Bosutinib Administered as Capsule Contents Mixed With Applesauce or Yogurt Relative to Intact Capsules in Healthy Participants Under Fed Condition]

Date(s) of this Report: 24 August 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 bosutinib?

Bosutinib is a medicine approved to treat chronic myeloid leukemia (CML). CML is a cancer that begins in cells within the bone marrow, the spongy inner portion of bones where blood cells are made.

What was the purpose of this study?

Bosutinib is a medicine that is taken by mouth (oral) as a capsule or tablet and is then absorbed (enters the blood) and distributed throughout the body to cancer cells. The purpose of this study was to determine if the amount of bosutinib that becomes available (enters the blood—known as "bioavailability") when the capsule is opened and contents are mixed with applesauce or yogurt is similar to when the capsules are swallowed intact, in healthy adult participants after eating breakfast. Some patients may have difficulty swallowing capsules, so the researchers wanted to determine if mixing the capsule contents with applesauce or yogurt would be an acceptable way to give bosutinib.

Relative bioavailability (comparison of the amount of bosutinib that becomes available when administered through different methods or conditions) is assessed through 2 parameters: (1) the total amount of bosutinib from when it is administered until it is no longer present in the body and (2) the highest amount of bosutinib in the blood.

This study did not test if bosutinib helps to treat CML.

Researchers wanted to know:

- **How did the estimated total amount of bosutinib in the blood compare when bosutinib was taken in these ways: (1) capsule opened and medicine mixed with apple sauce, (2) capsule opened and medicine mixed with yogurt, (3) whole capsule?**
- **How did the highest amount of bosutinib in the blood compare when bosutinib was taken in these ways: (1) capsule opened and medicine mixed with apple sauce, (2) capsule opened and medicine mixed with yogurt, (3) whole capsule?**
- **What medical problems did participants have during the study?**

What happened during the study?

How was the study done?

Researchers tested bosutinib on 18 healthy adult participants to determine the amount of bosutinib that entered the blood when the capsule contents were mixed with applesauce or yogurt, compared to when the capsules were swallowed intact.

The planned treatments for this study were:

- Treatment A: Bosutinib 500 mg, capsule contents mixed with 45 milliliters (mL) applesauce (equivalent to 3 tablespoons)
- Treatment B: Bosutinib 500 mg, capsule contents mixed with 45 mL yogurt

- Treatment C: Bosutinib 500 mg, capsule swallowed whole (intact)

Each participant was to take each of these treatments once during the study (1 treatment per treatment period), after eating breakfast.

This was an open-label study, which means that the participants and the researchers knew which treatments the participants received and in what order.

Researchers took samples of blood from participants during the study and measured the amount of bosutinib in the blood. Researchers also checked the participants' health during the study and asked them how they were feeling. There was a follow-up phone call about 30 days after the last dose of bosutinib.

Where did this study take place?

The Sponsor ran this study at a single location in Belgium.

When did this study take place?

It began 13 August 2021 and ended 27 January 2022.

Who participated in this study?

Healthy adult participants could join this study. Participants in this study did not have CML. Participants were examined by a study doctor and found to be appropriate to join the study.

A total of 18 participants were included in the study.

- All participants were between the ages of 21 and 54
- Of the 18 participants, 16 (89%) completed the study. Two participants left the study early due to study doctor decision.

How long did the study last?

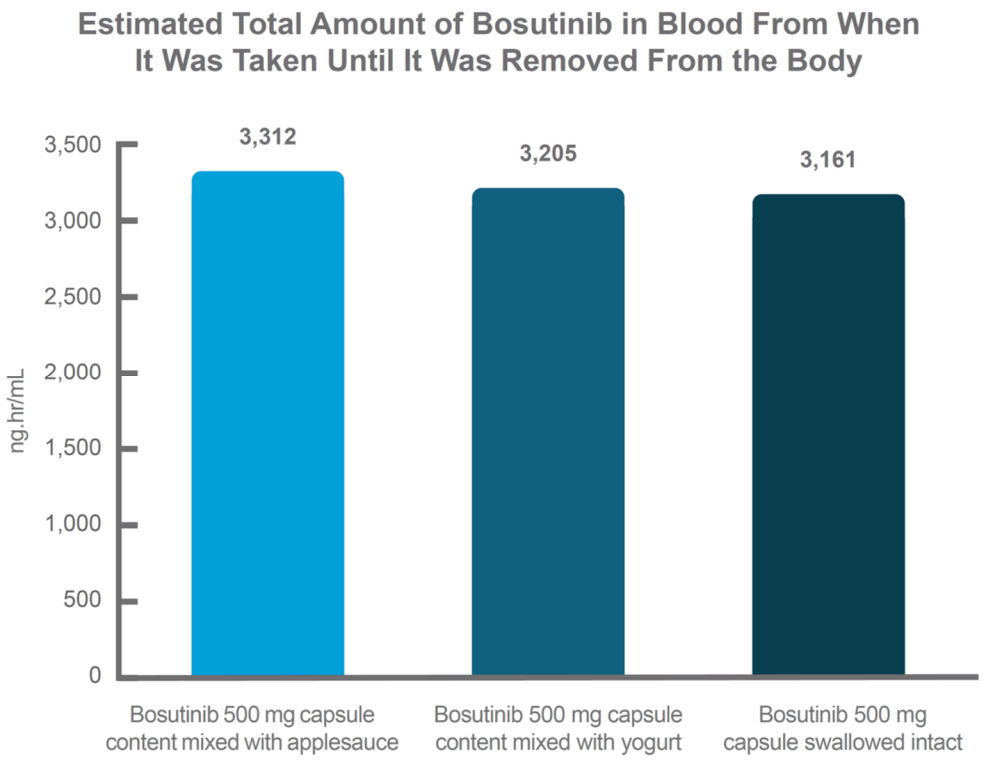
Study participants were in the study for up to about 13 weeks. The entire study took about 5 months to complete and was completed as planned.

When the study ended in January 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 does the estimated total amount of bosutinib in the blood compare when bosutinib was taken in these ways: (1) capsule opened and medicine mixed with apple sauce, (2) capsule opened and medicine mixed with yogurt, (3) whole capsule?

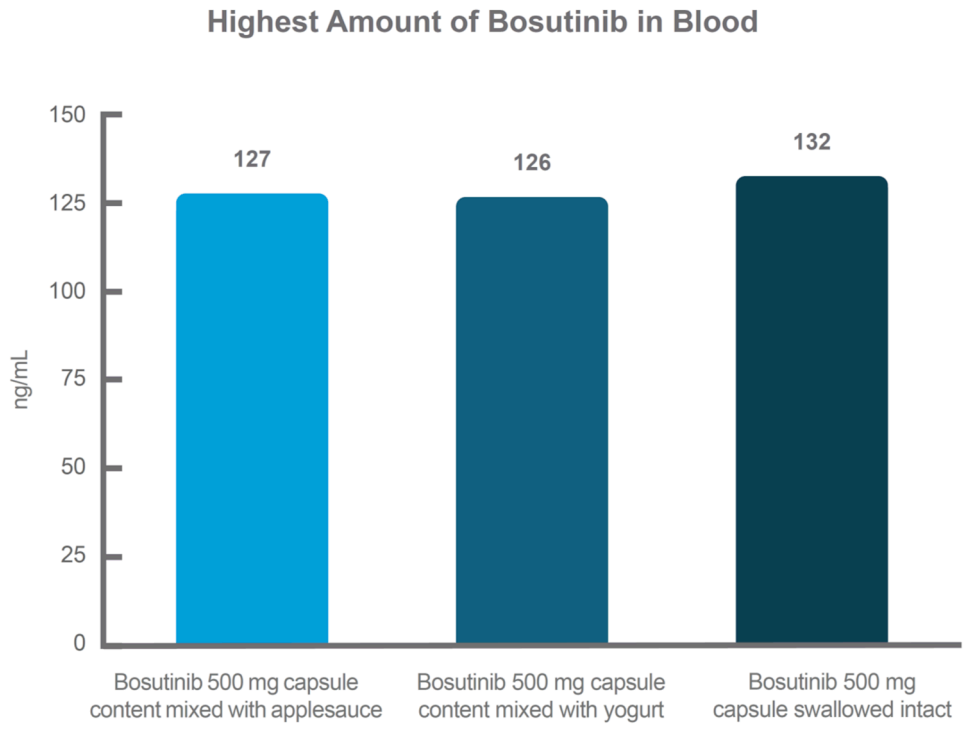
The figure below shows the estimated total amount of bosutinib measured in the blood from when bosutinib was taken until bosutinib was removed from the body. The estimated total amount of bosutinib in the blood was measured in nanogram hours per milliliter (ng•hr/mL).



Compared to when bosutinib was swallowed intact, the estimated total amount of bosutinib in the blood was not considered different when taken with applesauce or yogurt. On average, bosutinib total amount in blood was about 6% higher when it was mixed with applesauce than when it was swallowed intact. Compared to when bosutinib was swallowed intact, the estimated total amount of bosutinib in the blood was about 2% higher on average when it was mixed with yogurt than when it was swallowed intact.

How does the highest amount of bosutinib in the blood compare when bosutinib was taken in these ways: (1) capsule opened and medicine mixed with apple sauce, (2) capsule opened and medicine mixed with yogurt, (3) whole capsule?

The figure below shows the highest amount of bosutinib measured in the blood. The amount of bosutinib in the blood was measured in nanograms per milliliter (ng/mL).



Compared to when bosutinib was swallowed intact, the highest amount of bosutinib in the blood was not considered different when taken with applesauce or yogurt. On average, the highest amount of bosutinib in the blood was about 3% lower when it was mixed with applesauce than when it was swallowed intact. Compared to when bosutinib was swallowed intact, the highest amount of bosutinib in the blood was about 5% lower on average when it was mixed with yogurt than when it was swallowed intact.

These results suggest that mixing the capsule contents with applesauce or yogurt did not have an effect on the amount of bosutinib that entered the blood, and would be an acceptable way to give bosutinib.

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.

For Treatment A (bosutinib mixed with applesauce), 11 out of 16 (69%) participants had at least 1 medical problem. For Treatment B (bosutinib mixed with yogurt), 14 out of 17 (82%) participants had at least 1 medical problem. For Treatment C (bosutinib swallowed intact), 15 out of 18 (83%) participants had at least 1 medical problem. No participants left the study because of a medical problem. The table below shows the most common medical problems that happened during the study (at least 3 participants in any treatment group).

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 commonly reported during the study. Medical problems reported by at least 3 participants in any treatment group are listed.
- The **2nd** column tells how many of the 16 participants reported each medical problem with Treatment A. Next to this number is the percentage of the 16 participants who reported each medical problem with Treatment A.
- The **3rd** column tells how many of the 17 participants reported each medical problem with Treatment B. Next to this number is the percentage of the 17 participants who reported each medical problem with Treatment B.
- The **4th** column tells how many of the 18 participants reported each medical problem with Treatment C. Next to this number is the percentage of the 18 participants who reported each medical problem with Treatment C.
- Using these instructions, you can see that 7 out of 16 (44%) participants reported diarrhea with Treatment A, 11 out of 17 (65%) participants reported diarrhea with Treatment B, and 10 out of 18 (56%) participants reported diarrhea with Treatment C.

Table 1. Medical problems commonly reported by study participants			
Medical Problem	Treatment A: Bosutinib 500 mg Capsule Content Mixed With Applesauce (16 Participants)	Treatment B: Bosutinib 500 mg Capsule Content Mixed With Yogurt (17 Participants)	Treatment C: Bosutinib 500 mg Capsule Swallowed Intact (18 Participants)
Diarrhea	7 out of 16 participants (44%)	11 out of 17 participants (65%)	10 out of 18 participants (56%)
Abdominal discomfort	3 out of 16 participants (19%)	3 out of 17 participants (18%)	3 out of 18 participants (17%)
Feeling tired	3 out of 16 participants (19%)	3 out of 17 participants (18%)	2 out of 18 participants (11%)
Abdominal pain	2 out of 16 participants (13%)	2 out of 17 participants (12%)	3 out of 18 participants (17%)
Nausea	1 out of 16 participants (6%)	6 out of 17 participants (35%)	4 out of 18 participants (22%)

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. No participants in this study had serious medical problems, and 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.clinicaltrials.gov Use the study identifier **NCT04916769**

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!