



CLINICAL TRIAL 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 medicine 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: PF-05280014

Protocol Number: B3271004

Dates of Trial: 23 September 2014 to 09 March 2016

Title of this Trial: A Randomized Clinical Trial of PF-05281104 Versus Herceptin[®] for Patients with HER2-Positive Breast Cancer (REFLECTIONS B327-04)

[A Randomized, Double-Blind Pharmacokinetic Study Of PF-05280014 Plus Taxotere[®] And Carboplatin Versus Herceptin[®] Plus Taxotere[®] And Carboplatin For The Neoadjuvant Treatment Of Patients With Operable HER2-Positive Breast Cancer]

Date of this Report: 08 August 2018

— *Thank You* —

Pfizer, the Sponsor, would like to thank you for your participation in this clinical trial and provide you a summary of results representing everyone who participated. If you have any questions about the study or results, please contact the doctor or staff at your study site.

WHY WAS THIS STUDY DONE?

Some women with breast cancer have high levels of a certain protein receptor on the surface on their cancer cells. This protein is called HER2 (human epidermal growth factor receptor 2). A cell with too many HER2 receptors is stimulated to grow and multiply too fast and can become a cancer. When women with breast cancer have too much of this protein their cancer is called “HER2-positive”.

Trastuzumab is an approved drug for the treatment of patients with HER2-positive cancer and has been available for patient use by prescription for several years. The name for trastuzumab, which is approved for sale, is Herceptin[®]. PF-05280014 was the investigational drug in this study. An investigational drug is one that is not approved for sale.

Researchers think that PF-05280014 works like Herceptin[®] in the body. Herceptin[®] is an antibody, which is a type of protein. Herceptin[®] binds to the HER2 receptor on the surface of cells. By attaching to the HER2 receptor, this medicine can block the signals that cause the cells to grow and multiply.

Patients who were in this study received either PF-05280014 or Herceptin[®] in combination with Taxotere[®] and carboplatin. Taxotere[®] and carboplatin are standard chemotherapy treatments for breast cancer. They were used in this study because they are commonly given to patients by doctors for the treatment of breast cancer. In this study, women were given these medicines as a first step to shrink the tumor before surgery (neoadjuvant). All women in this study were planned to have surgery after treatment.

WHAT HAPPENED DURING THE STUDY?

This study compared 2 groups of patients. Researchers wanted to find out if PF-05280014 worked similarly to Herceptin[®] in patients with breast cancer.

This study included adult women who:

- Had newly diagnosed, early breast cancer
- Did not receive prior treatment for their breast cancer
- Planned to get surgery for their breast cancer tumor after chemotherapy

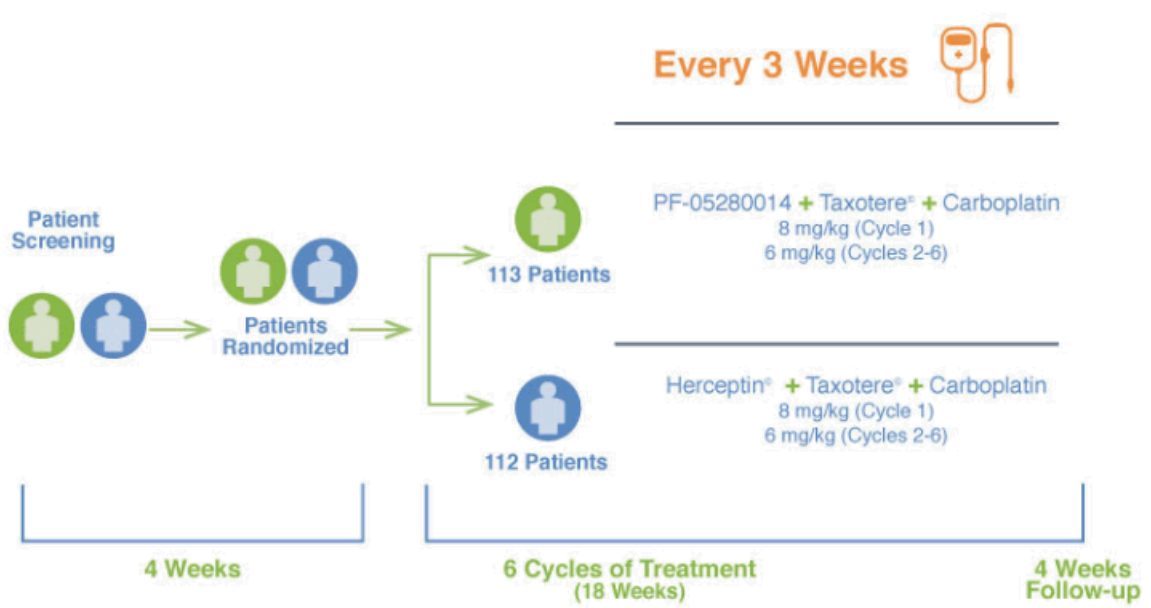
The patients and researchers did not know who took PF-05280014 and who took Herceptin[®]. This is known as a “double-blinded” study. Researchers use “double-blinded” studies to make sure that the results of the study are not influenced in any way. Patients were put into 1 of 2 treatment groups by chance alone. This is known as a “randomized” study. This is done to make the groups more similar for things like age and race. Reducing differences between the groups makes the groups more even to compare. Patients had a 50% chance (1 in 2 chances, like the flip of a coin) of getting either treatment.

For 4 weeks, patients were checked (screened) to make sure they met all the requirements to be in the study. Then, patients were put into 1 of 2 groups and were given 6 cycles of treatment. Each cycle occurred every 3 weeks. After taking the study medicines, patients were followed by researchers for 4 weeks (follow-up phase) to see how they did after taking study medicines.

While patients were only in the study for about 7 months, the entire study took 17 months to complete. Pfizer ran this study at 46 locations in 10 countries in Europe and the United States. It began 23 September 2014 and ended 09 March 2016. 226 women participated. 1 patient was randomized, but did not receive any study drug. All patients were between the ages of 24 and 79.

The diagram below shows what happened to patients in the study.

What Happened During the Study?



Patients were supposed to be treated through 6 cycles of treatment. Of the 225 patients who got at least 1 cycle of treatment, 215 finished the study. 10 patients left before the study was over by their choice or because a doctor decided it was best for a patient to stop the study.

When the study ended in March 2016, Pfizer began reviewing the information collected. Pfizer then created a report of the results. The following is a summary of that report.

WHAT WERE THE RESULTS OF THE STUDY?

Does PF-05280014 work similarly to Herceptin[®] in the body?

Researchers wanted to see if the amount of PF-05280014 in the blood (blood levels) of the patients was similar to that of Herceptin[®].

This study showed that PF-05280014 and Herceptin[®] had similar blood levels. Researchers chose a certain blood level as the target for these study medicines. Blood tests showed that patients in both groups, on average, reached this comparable blood level by Cycle 5 of treatment. After Cycle 5, the blood level of study medicine in the body remained similar until Cycle 6. These results were comparable for both study medicines.

The researchers also looked to see if patients had achieved pathologic complete response, or “pCR”. This is when no cancer cells are found in the breast or lymph nodes after treatment for their cancer. This study showed that a similar amount of women had pCR for both groups. Based on these results and the number of patients, the researchers have concluded that the results are not likely the result of chance.

This does not mean that everyone in this study had these results, and an individual result could be better or worse than that of the overall group. Other studies may get different results. These are just some of the main findings of the study, and more information may be available at the websites listed at the end of this summary.

WHAT MEDICAL PROBLEMS DID PATIENTS HAVE DURING THE STUDY?

The researchers recorded any medical problems the patients had during the study. Patients 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 have been caused by a study treatment, or by another drug the patient was taking during the study. 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 the side effects of an experimental drug might be.

A total of 3 patients left the study due to medical problems. 212 out of 225 patients in this study had at least 1 “non-serious” medical problem (that means a medical problem that is not life-threatening, does not cause lasting problems, or needs hospital care). The most common non-serious medical problems reported by patients in this study are listed below.

Loss of hair, low red blood cell count, and low white blood cell count were the most frequently reported medical problems patients experienced during the study. They were similar between both the PF-05280014 and Herceptin[®] groups.

**Most Common Non-Serious Medical Problems
(Reported by More Than 5% of Patients)**

Medical Problem	PF-05280014 (113 Patients Treated)	Herceptin® (112 Patients Treated)
Loss of hair	72 (64%)	69 (62%)
Low white blood cell count	53 (47%)	66 (59%)
Low red blood cell count	56 (50%)	51 (46%)
Nausea	38 (34%)	34 (30%)
Weakness	36 (32%)	23 (21%)
Low platelet count	16 (14%)	19 (17%)
Diarrhea	16 (14%)	19 (17%)
Abnormal liver blood test	10 (9%)	17 (15%)
Joint pain	16 (14%)	8 (7%)
Tiredness	15 (13%)	19 (17%)
Low appetite	13 (12%)	9 (8%)
Damage to the nerves	13 (12%)	8 (7%)
Bone pain	13 (12%)	5 (5%)
Vomiting	7 (6%)	10 (9%)
Fever	6 (5%)	5 (5%)
Change in how things taste	4 (4%)	6 (5%)
Low white blood cell count with fever	3 (3%)	6 (5%)

WERE THERE ANY SERIOUS MEDICAL PROBLEMS?

A medical problem is considered “serious” when it is life-threatening, causes lasting problems, or needs hospital care.

13 patients (6%, or 13 out of 225 patients) had serious medical problems, 7 patients in the PF-05280014 group and 6 patients in the Herceptin[®] group. Only 1 of these serious medical problems was considered by the patient’s study doctor or Pfizer to be related to PF-05280014 treatment. Specifically, 1 patient in the PF-05280014 group died during the study due to low white blood cell count which the patient’s study doctor and Pfizer considered to be related to the study treatment.

Please see the table below for more information on what types of serious medical problems patients had.

Serious Medical Problems Reported by Patients		
Medical Problem	PF-05280014 (113 Patients Treated)	Herceptin [®] (112 Patients Treated)
Infections (any kind)	2 (2%)	2 (2%)
Low white blood cell count	2 (2%)	1 (1%)
Low white blood cell count with fever	1 (1%)	2 (2%)
Inflammation of the rectum	1 (1%)	0 (0%)
Low red blood cell count	0 (0%)	1 (1%)
Broken hip	0 (0%)	1 (1%)
Dehydration	0 (0%)	1 (1%)
Low potassium in the blood	0 (0%)	1 (1%)
High creatinine in the blood (can mean kidneys are not working as well)	1 (1%)	0 (0%)

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.

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

www.clinicaltrials.gov

Use the study identifier **NCT02187744**

www.clinicaltrialsregister.eu

Use the study identifier **2013-004679-11**

Further clinical trials with PF-05280014 were conducted.

Please remember that researchers look at the results of many studies to find out which medicines work best and are safest for patients.

Again, thank you for volunteering.
We do research to try to find the
best ways to help patients, and you
helped us to do that!