



# CLINICAL TRIAL RESULTS

This summary reports the results of one study investigating how the study medicine works and whether it is safe to prescribe to patients. As of the date of this report, this study and its extension study are the only studies to investigate this study medicine in Duchenne Muscular Dystrophy patients. The results reported here might differ from additional studies that may be conducted with the same medicine in the future.

**Sponsor:** Pfizer, Inc.

**Medicine(s) Studied:** Domagrozumab

**Protocol Number:** B5161002

**Dates of Trial:** 24 November 2014 to 23 November 2018

**Title of this Trial:** A Phase 2 Study to Evaluate the Safety, Efficacy, Pharmacokinetics and Pharmacodynamics of PF-06252616 in Boys with Duchenne Muscular Dystrophy

[A Phase 2 Randomized, Double-Blind, Placebo-Controlled, Multiple Ascending Dose Study to Evaluate the Safety, Efficacy, Pharmacokinetics and Pharmacodynamics of PF-06252616 in Ambulatory Boys With Duchenne Muscular Dystrophy]

**Date of this Report:** 9 January 2020

– *Thank You* –

Pfizer, the Sponsor, would like to thank you and your son for participating 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 son's study site.

## WHY WAS THIS STUDY DONE?

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Duchenne muscular dystrophy (DMD) is a disease that damages muscles, causing muscle weakness and loss of the ability to walk. DMD is most common in boys.

Domagrozumab is an experimental medicine studied for DMD. Domagrozumab has not been approved for use outside of research studies.

The main goal of this study was to learn more about the use of domagrozumab in boys with DMD. Researchers wanted to answer these questions:

- What medical problems did boys have during the study?
- Did boys who received domagrozumab have an improvement in functioning after 49 weeks of treatment, compared to boys who received placebo?

A placebo looks just like the medicine, but doesn't have any medicine in it.

To see if boys had an improvement in functioning, researchers used a test called the "4 Stair Climb". They measured how long it took the boys to go up stairs and then compared the results between the boys who received domagrozumab and those who received placebo.

## WHAT HAPPENED DURING THE STUDY?

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This study compared boys taking domagrozumab or placebo. The study included boys with DMD who were able to walk, and were at least 6 but younger than 16 years old when the study began.

First, boys were screened by the study doctors. Certain tests were done to make sure the boys were a good fit to join the study.

Next, boys were assigned to 1 of 3 treatment groups. Boys were assigned to each group by chance alone. Putting boys into groups by chance helps make the groups more even to compare. The study was done in 2 parts, so that each boy would receive domagrozumab during part of the study. Each part lasted about 48 weeks. The boys, their parents, and the researchers did not know who took domagrozumab

and who took the placebo. This is known as a “blinded” study. Boys were assigned to each group by chance alone.

#### Group 1: 41 Boys

- Part 1: Domagrozumab starting at 5 milligrams per kilogram of weight (mg/kg), then increased to 20 mg/kg, then to 40 mg/kg
- Part 2: Domagrozumab 40 mg/kg

#### Group 2: 39 Boys

- Part 1: Domagrozumab starting at 5 mg/kg, then increased to 20 mg/kg, then to 40 mg/kg
- Part 2: Placebo

#### Group 3: 40 Boys

- Part 1: Placebo
- Part 2: Domagrozumab starting at 5 mg/kg, then increased to 20 mg/kg, then to 40 mg/kg

All study drugs were given as an IV infusion, which means that a needle is placed in the vein and the study drug slowly drips into the vein.

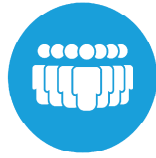
When they came to study visits, boys were asked to complete questionnaires about their DMD symptoms and do tests, like the 4 Stair Climb test.

Finally, boys were asked to participate in 2 follow-up visits after they stopped study treatment.

The figure on the following page shows what happened during this study.



Boys  
screened by  
study doctor



Boys  
randomly  
assigned to  
1 of 3 treatment  
groups



Study Part 1  
120 boys  
48 weeks



Study Part 2  
113 boys  
48 weeks



Boys  
participated in  
2 follow-up  
visits

While boys were in the study for less than 2 years, the entire study took about 4 years to complete. The sponsor ran this study at 35 locations in Australia, Bulgaria, Canada, Italy, Japan, Poland, United Kingdom, and United States. It began 24 November 2014 and ended 23 November 2018. All 120 participants were boys between the ages of 6 and 15.

Boys were to complete Part 1 and Part 2 of the study, and participate in 2 follow-up visits. Of the 120 boys who entered the study and received study treatment, 65 boys (54%) completed it. 55 boys (46%) did not complete the study by their choice or because a doctor decided it was best for a boy to stop the study, or because the Sponsor decided to stop the study early.

The Sponsor decided to stop the study early in November 2018, because results did not show that boys benefited from taking domagrozumab. After the study ended, the Sponsor then created a report of the results. This is a summary of that report.

## WHAT WERE THE RESULTS OF THE STUDY?

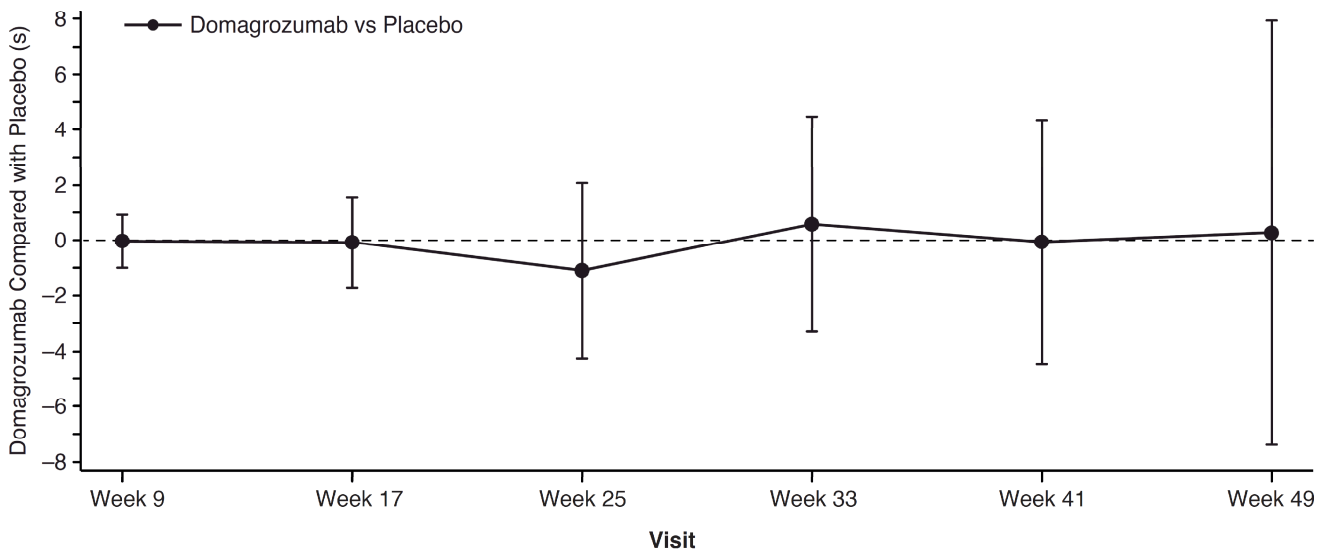
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### **Did boys who received domagrozumab have an improvement in functioning after 49 weeks of treatment, compared to boys who received placebo?**

To answer this question, the researchers looked at the results of the 4 Stair Climb test from before boys started study treatment, and after they had received study treatment for 49 weeks. The researchers looked to see if there were differences in the test results between the boys receiving domagrozumab versus the boys receiving placebo.

After 49 weeks of treatment, the change in the 4 Stair Climb test was about the same for boys who received domagrozumab and boys who received placebo. In other words, this study did not show that boys who received domagrozumab had an improvement in functioning, compared to boys who received placebo.

The figure below shows the change in results of the 4 Stair Climb test over 49 weeks, for boys who received domagrozumab versus boys who received placebo.



This does not mean that everyone in this study had these 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 BOYS HAVE DURING THE STUDY?

The researchers recorded any medical problems the boys had during the study. Boys 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 boy 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 the side effects of an experimental drug might be.





## Most Common Medical Problems Part 2 (Reported in More Than 10% of Boys)

| Medical Problem                                 | Group 1<br>(38 Boys treated) | Group 2<br>(37 Boys treated) | Group 3<br>(38 Boys treated) | Total<br>(113 Boys treated) |
|---|------------------------------|------------------------------|------------------------------|-----------------------------|
| Fall  | 13 (34%)                     | 7 (19%)                      | 15 (40%)                     | 35 (31%)                    |
| Common cold                                     | 6 (16%)                      | 9 (24%)                      | 9 (24%)                      | 24 (21%)                    |
| Infection of the nose, throat, or upper airways | 7 (18%)                      | 7 (19%)                      | 8 (21%)                      | 22 (20%)                    |
| Cough   | 7 (18%)                      | 4 (11%)                      | 10 (26%)                     | 21 (19%)                    |
| Headache  | 4 (11%)                      | 4 (11%)                      | 11 (29%)                     | 19 (17%)                    |
| Vomiting  | 3 (8%)                       | 8 (22%)                      | 5 (13%)                      | 16 (14%)                    |
| Diarrhea  | 6 (16%)                      | 5 (14%)                      | 4 (11%)                      | 15 (13%)                    |
| Pain in arms or legs                            | 4 (11%)                      | 3 (8%)                       | 8 (21%)                      | 15 (13%)                    |
| Difficulty walking                              | 2 (5%)                       | 6 (16%)                      | 4 (11%)                      | 12 (11%)                    |
| Sunny nose                                      | 5 (13%)                      | 3 (8%)                       | 3 (8%)                       | 11 (10%)                    |
| Fever   | 5 (13%)                      | 2 (5%)                       | 4 (11%)                      | 11 (10%)                    |

## WERE THERE ANY SERIOUS MEDICAL PROBLEMS?

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

During Part 1, 2 out of 120 boys (2%) had serious medical problems. During Part 2, 3 out of 113 boys (3%) had serious medical problems. All boys who had serious medical problems received domagrozumab during the study. No boys died during this study. During the extension study that followed this study, 1 boy passed away for a reason not related to taking domagrozumab.

The serious medical problems during Part 1 and Part 2 are listed below.

| <b>Serious Medical Problems Part 1</b>                         |   |                                      |
|--|---|--------------------------------------|
| <b>Serious Medical Problem</b>                                 | <b>Domagrozumab<br/>(80 Boys treated)</b> | <b>Placebo<br/>(40 Boys treated)</b> |
| Appendicitis   | 1 (1%)                                    | 0 (0%)                               |
| Blood clot in sinuses that drain blood from brain              | 1 (1%)                                    | 0 (0%)                               |
| Anxiety  | 1 (1%)                                    | 0 (0%)                               |
| <b>Serious Medical Problems Part 2</b>                         |   |                                      |
| <b>Serious Medical Problem</b>                                 | <b>Domagrozumab<br/>(76 Boys treated)</b> | <b>Placebo<br/>(37 Boys treated)</b> |
| Hip fracture   | 1 (1%)                                    | 0 (0%)                               |
| Thigh bone fracture  | 1 (1%)                                    | 0 (0%)                               |
| Increased level of a type of protein found in muscles of heart | 1 (1%)                                    | 0 (0%)                               |

## **WHERE CAN I LEARN MORE ABOUT THIS STUDY?**

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If you have questions about the results of your son's study, please speak with the doctor or staff at your son's study site. The full scientific report of this study is available online at:



[www.clinicaltrials.gov](http://www.clinicaltrials.gov)

Use the study identifier **NCT02310763**

[www.clinicaltrialsregister.eu](http://www.clinicaltrialsregister.eu)

Use the study identifier **2016-001615-21**

The results reported here might differ from additional studies that may be conducted with the same medicine in the future. No additional studies with domagrozumab are currently planned.

Again, **thank you** for assisting with this research. The commitment and expertise provided by the Duchenne Muscular Dystrophy community were invaluable contributions to the clinical study.

We do research to try to find the best ways to help patients, and you and your son helped us to do that!