CLINICAL STUDY RESULTS

First research study of XTMAB-16 in healthy adult participants to determine whether the investigational drug is safe and how it is absorbed by the body

About this summary

Results from research studies about investigational drugs are described in a report called a “Clinical Study Report”. A Clinical Study Report is for researchers, health professionals and people who approve investigational drugs. This is a summary of that report in plain language.

This summary was completed in January 2023. Newer information about XTMAB-16 since this summary was written may now exist.

The summary includes results from this study only. Other studies of XTMAB-16 may have different results.

1. CLINICAL STUDY IDENTIFICATION

Title of the study: A Randomized, Double-blind, Placebo-controlled, First-in-Human Study to Evaluate the Safety, Tolerability, and Pharmacokinetics of a Single Intravenous Infusion of XTMAB-16 in Healthy Adult Participants

Protocol number: XTMAB-16-101

Other identifiers: NCT (National Clinical Trial) number NCT04971395

2. NAME AND CONTACT DETAILS OF SPONSOR

Who sponsored this study?

This study was sponsored by Xentria™, Inc.

Address: Xentria, Inc.
2071 N. Southport Ave., Suite 201
Chicago, IL 60614
United States

Telephone number: 224-443-4615

Email address: info@xentria.com

Website: www.xentria.com

If you took part in this study, we would like to **thank you for your participation** and for making this clinical research possible. The full title of the study is described in section 1. The study is now complete, and all the information gathered has been analyzed. The company that ran the study, called the sponsor, would like to let you know about the results. The sponsor of this study was Xentria™, Inc. If you have any questions about the study or the results, please contact the doctor or staff at the study site.

3. GENERAL INFORMATION ABOUT THE STUDY

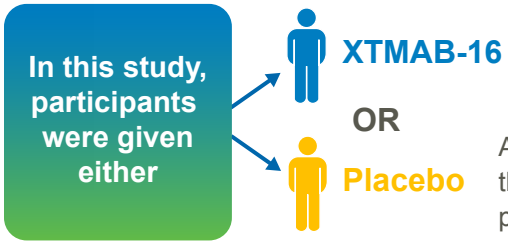
"Investigational" means XTMAB-16 has not been approved by the US (United States) Food and Drug Administration (FDA) for use outside research studies like this one.

What is XTMAB-16?

This study tested an investigational drug, called **XTMAB-16**.

Xentria is developing XTMAB-16 for the treatment of **sarcoidosis**. Sarcoidosis is a disease in which clumps of immune cells (cells that help fight infections) form in one or more organs throughout the body and become inflamed. These clumps of immune cells are called **granulomas**. Some immune cells release a cytokine (a signaling protein) called **tumor necrosis factor alpha** (TNF-α) that may promote the formation of harmful granulomas and **fibrosis**, which is the thickening and scarring of tissue, throughout the body in people with sarcoidosis.

Researchers believe XTMAB-16 works by blocking TNF-α, which may disrupt an important inflammatory pathway and help slow or stop granuloma formation.



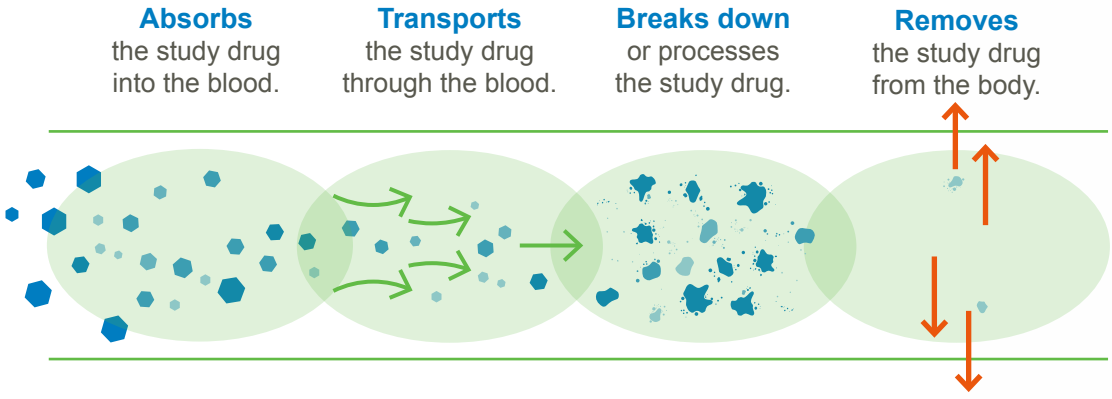
A **placebo** contained no active medicine. It is a product that looked like XTMAB-16 and was given to the participants in the same way.

In this document, the term "study drug" refers to both XTMAB-16 and placebo.

Why is this study important?

Before a drug can be approved to treat the symptoms of a disease, clinical studies are done to test whether it works and if there are any side effects. This study was done to confirm whether people could take the suggested dose levels of XTMAB-16 without having severe side effects. An additional purpose of this study was to look at how safe and tolerable XTMAB-16 was when given at two different doses to healthy men and women. None of the healthy men or women had sarcoidosis.

Information collected during this study also helped researchers learn more about the pharmacokinetics of the study drug. Pharmacokinetics means how the human body:



The study also looked at how the body's immune system reacts to XTMAB-16.

3. GENERAL INFORMATION ABOUT THE STUDY (continued)

This was the first time XTMAB-16 was studied in humans. Only healthy volunteers took part in this study.

What did the researchers want to know?

This was a **Phase 1 study**. A Phase 1 study tests investigational drugs (which have not been approved by the US FDA for use outside research studies) to see how they behave in the body. Phase 1 studies also try to find the safest dose that people can take. In a Phase 1 study, researchers usually give an investigational drug to a small number of people who do not have the disease or condition for which the drug is being considered. These people are called **healthy volunteers**.

For the purposes of this study, the researchers wanted to look at the safety of XTMAB-16 after one infusion. For this, the researchers recorded and considered all expected and unexpected medical issues that the study participants had after taking their study drug (XTMAB-16 or placebo), even if they did not think the study drugs caused these issues.

In this study, researchers also looked at how much XTMAB-16 is found in **plasma** (the liquid part of the blood) when injected in the body. XTMAB-16 is given by infusion, and travels to the area where it acts in the body through blood. Researchers think that the concentration of XTMAB-16 in plasma can tell us how much drug will reach the site of action.

This study also looked at the **immunogenicity** of XTMAB-16. Immunogenicity is the ability of XTMAB-16 to trigger antibodies in blood. These are called **anti-drug antibodies**. Antibodies are proteins in the blood that help the body's immune system (the body's natural defenses) by identifying and attaching to specific external elements, including germs and viruses.

In this study, two different doses of XTMAB-16 were compared with a **placebo**.

When did the study take place?

The study started in June 2021 and ended in March 2022.

Where did the study take place?

The study took place at a single clinical site, Parexel Baltimore – Early Phase Clinical Unit, in the US.

How long did the study last?

Participants could be in the study for up to approximately 10 weeks.

4. WHO WAS INCLUDED IN THIS STUDY?

The study was open to healthy adults:

- ☑ Aged 18–45 years.
- ☑ Weighing between 45 and 100 kg.
- ☑ Having a body mass index (a measure of body weight in relation to height, commonly called BMI) between 18 and 30 kg/m^2.

A total of 25 participants from the US took part in this study and received one dose of either XTMAB-16 or placebo.

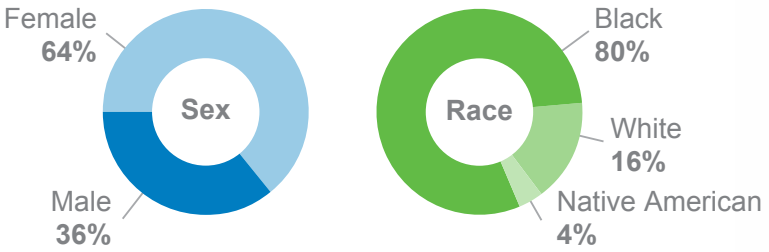
19 participants received **XTMAB-16**

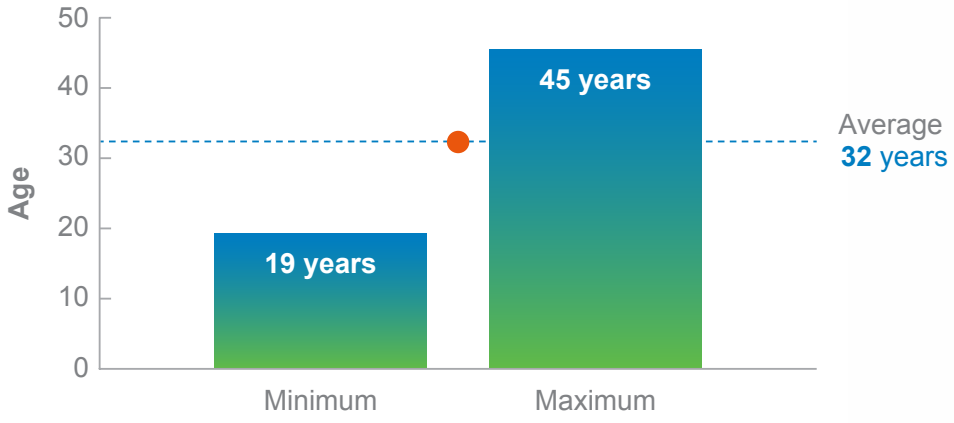
6 participants received **placebo**

Participants who had health issues according to the study doctor or had a known previous allergic reaction to the components of the study drugs were screened, but not enrolled or dosed in the study.

Dosage group	XTMAB-16	Placebo
2 mg/kg	10 participants	3 participants
4 mg/kg	9 participants	3 participants
TOTAL	25 participants	

About the study participants



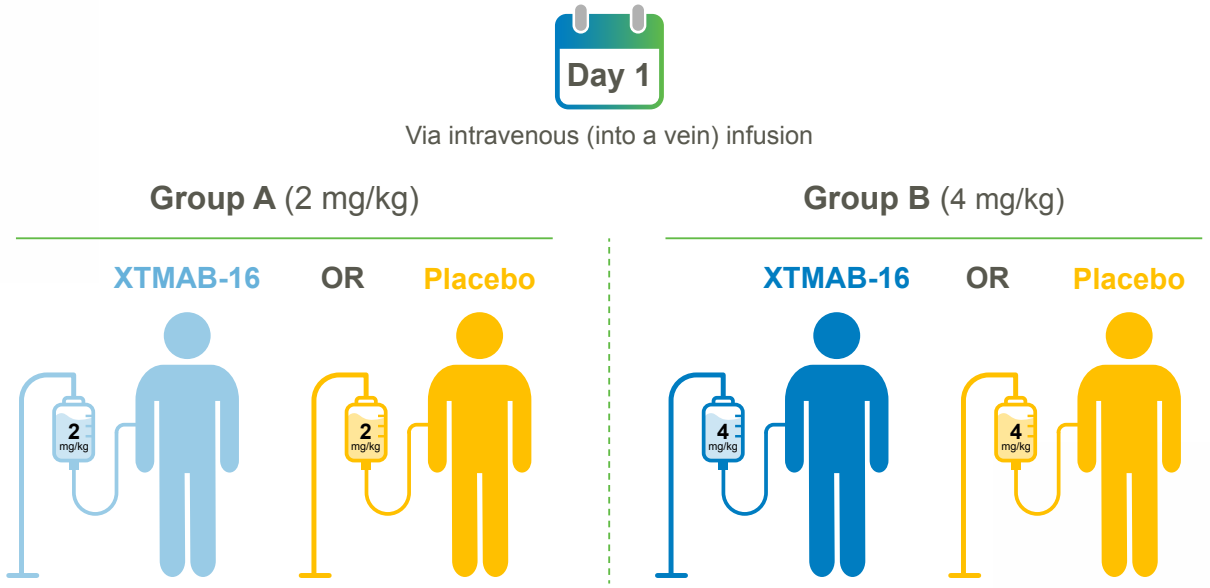


5. WHAT HAPPENED DURING THE STUDY?

Researchers studied two groups of participants (Group A: XTMAB-16 2 mg/kg and Group B: XTMAB-16 4 mg/kg) to learn more about the safety of XTMAB-16. Participants were assigned to receive either XTMAB-16 or placebo by chance (**randomized**).

This study was **double blinded** – this means that neither the doctors nor the participants knew whether a participant was receiving XTMAB-16 or placebo. This strategy was used to make sure the results were not influenced by researchers knowing who received which study drug.

Randomization helps to prevent bias. In a clinical study, bias is the effect of human choices on study results. Randomization also helps make sure that the participants in the two groups are as similar as possible except for the treatment they receive. This ensures that researchers know that any difference between the two groups is due to the different treatments.



Comparing XTMAB-16 with a placebo is important to help researchers better understand the behavior (good or bad) of the investigational drug in the body.

6. WHAT WERE THE SIDE EFFECTS IN THIS STUDY?

Side effects are unwanted medical experiences that happen during the study and are reported because they are thought to be related to the study drug. Not all participants in this study had side effects.

Of the 25 participants in the study, 6 participants (24%) had side effects. No serious side effects were noted as being related to the study drug, and no participants were removed from the study because of side effects.

A side effect is serious if it:

- Leads to death.
- Is life-threatening.
- Puts a participant in the hospital.
- Causes a birth defect.
- Causes a disability.
- Keeps a participant at the hospital for an unexpected amount of time.

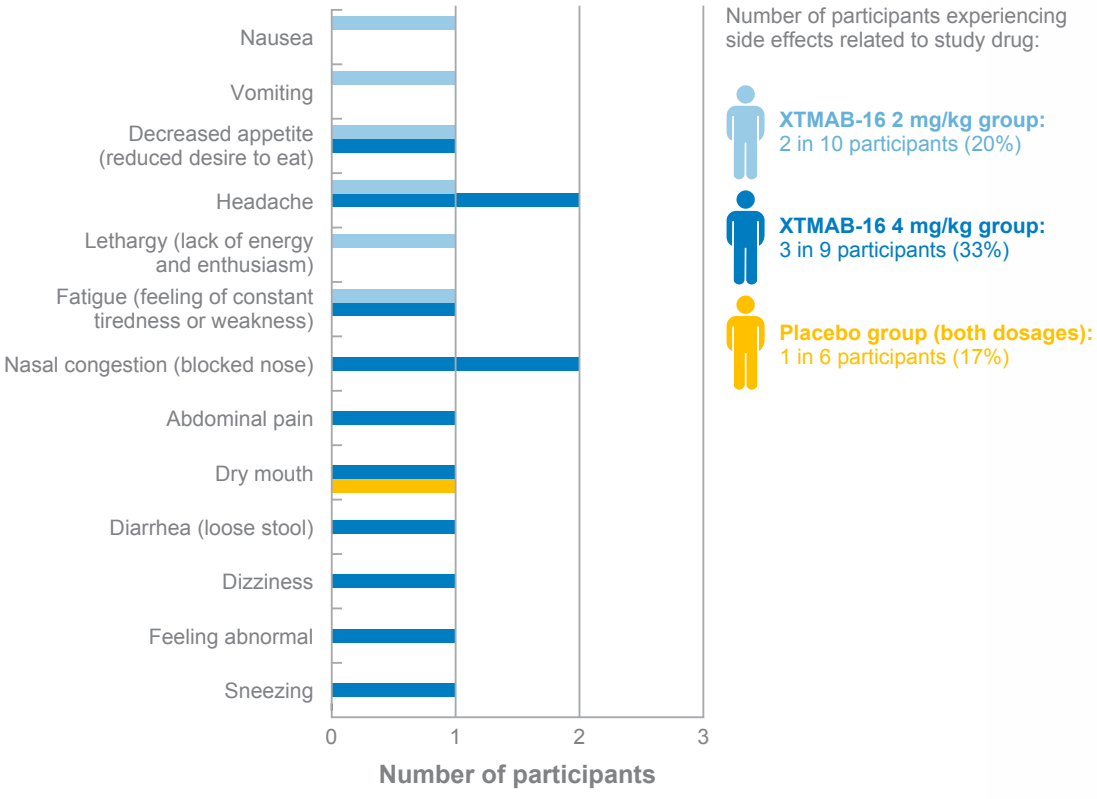
Did participants experience serious side effects?

In this summary, side effects are shown by actual study drug received: 2 mg/kg group, 4 mg/kg group, or placebo. One in 25 participants (4%) had a serious side effect of abdominal (stomach) pain during the study. This participant was in the 4 mg/kg group. The stomach pain was not related to the study drug, according to the study doctor.

No participant died during the study.

What were the most common side effects in this study?

Common side effects were observed in 6 of the 25 participants. More side effects were seen in the 4 mg/kg group than in the 2 mg/kg group. The most common side effects were as follows:

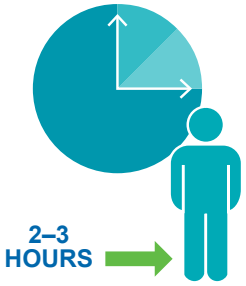


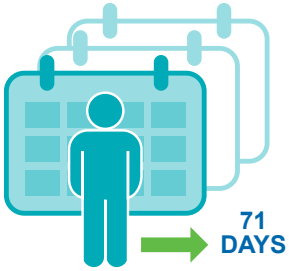
7. WHAT WERE THE OVERALL OUTCOMES FROM THIS STUDY?

How was XTMAB-16 processed by the body?

After a single intravenous infusion in both 2 mg/kg and 4 mg/kg groups, XTMAB-16 was quickly available in plasma (the liquid part of the blood). After one dose, the highest level of XTMAB-16 in plasma was reached within 2–3 hours after dosing.

XTMAB-16 was removed slowly from the body and could be measured in plasma up to 71 days after dosing. Researchers measured the average exposure of XTMAB-16 for each dosing group.





This may suggest that the effect of XTMAB-16 in the body may start within 2–3 hours of receiving a dose.

These results suggest that XTMAB-16 may not stay in the body any longer than 71 days after the last dose.

Future studies will continue to find out more about how XTMAB-16 behaves in the body, and how it is removed from the body.

How did the body's immune system respond to XTMAB-16?

There were no anti-drug antibodies in the participants' blood before XTMAB-16 was given.

The 2 mg/kg group had a higher concentration of anti-drug antibodies compared with the 4 mg/kg group (60% vs 22%). This indicated that XTMAB-16 caused more antibodies to be produced in the 2 mg/kg group compared with the 4 mg/kg group after a single intravenous infusion. No side effects were associated with this finding and researchers will continue to study anti-drug antibodies in future studies of XTMAB-16.

This is a summary of some of the main results of the study. Not all participants had these results and other studies may have different results.

8. HOW HAS THIS STUDY HELPED PEOPLE AND RESEARCHERS?

In this study, participants who took the lower dose of XTMAB-16 (2 mg/kg) had fewer side effects compared with participants who took the higher dose of XTMAB-16 (4 mg/kg).

All participants who were given XTMAB-16 showed quick availability of XTMAB-16 in the blood and slow removal from the blood.

This study involved only healthy participants. More studies are needed to show whether XTMAB-16 works in people with sarcoidosis. This research, and future studies, may help researchers understand more about XTMAB-16.

This summary includes results from only one study (the Phase 1 study) in a research program.

9. ARE ANY OTHER STUDIES PLANNED WITH XTMAB-16?

The sponsor is testing XTMAB-16 in other studies to find out whether XTMAB-16 helps people with sarcoidosis, and how XTMAB-16 can be used safely for longer durations. Information about these studies can be found at www.xentria.com.

10. WHERE CAN I FIND MORE INFORMATION ABOUT THIS STUDY OR XTMAB-16?

You can find more detailed information about this study on these websites:

Sponsor's website: **www.xentria.com**

Registry of clinical studies in the US: **www.ClinicalTrials.gov**
(ClinicalTrials.gov identifier for this study NCT04971395)

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