Clinical Study Protocol Synopsis

A study to learn about the safety and tolerability of BB-1701 and how well it may work in people with a certain kind of breast cancer

Full Study Title:	An open-label, multicenter, Phase 2 dose optimization and expansion study to evaluate the safety and efficacy of BB-1701, an anti-human epidermal growth factor receptor 2 (anti-HER2) antibody-drug conjugate (ADC), in previously treated subjects with HER2-positive or HER2-low unresectable or metastatic breast cancer
EU Clinical Study Number:	2023-506866-30 **US Clinical Study Number:** NCT06188559
Study Sponsor:	Eisai, Inc., Nutley, NJ, USA Telephone number: +1 201-692-1100

Why is this research needed?

Researchers are looking for a different way to treat people who have a specific type of breast cancer (BC). Participants in this study have human epidermal growth factor receptor 2 (HER2)-positive or HER2-low BC that has spread to other parts of the body or cannot be removed by surgery.

There are limited treatment options available for this kind of BC.

Breast cancer is a kind of cancer that begins as a growth of abnormal cells in the breast.

BB-1701 might be able to help people possibly live longer with this kind of BC by specifically targeting cancer cells that express HER2 to shrink the tumors.

In this 2-part study, researchers want to learn about the safety of BB-1701 and how well it may work in participants with this kind of BC.

What treatment is being studied?

All participants will receive BB-1701 as an injection through the vein. This is called intravenous infusion (or IV infusion).

Study doctors will give BB-1701 once or twice in repeating 21-day periods called treatment cycles.

Doses of BB-1701 will be measured in milligrams per kg of body weight (also called mg/kg).

Everyone involved in the study will know which dose participants will receive. This is called an open-label study.

What are the goals of this study?

The primary objectives are to investigate the safety and tolerability of BB-1701 and how well it may work, as well as to determine the dose to be used in Part 2.

The secondary objectives are to investigate in more detail the safety of BB-1701 and how well it may work, as well as how it distributes through and clears out from the body.

What are the measurements in this study?

1. **Main measurement:** To investigate the primary objectives, researchers will find out the objective response rate. They will also collect information on any medical problems that participants may have during the study and other safety information.

2. **Secondary measurements:** To investigate the secondary objectives, researchers will use the following measurements (see page 3 for definitions of terms):

Duration of response	Progression-free survival	Overall survival	Disease control rate
Clinical benefit rate	Time to response	Pharmacokinetics	Pharmacodynamics

The researchers will also collect other information about BB-1701. But the measurements described above are the most important for this study.

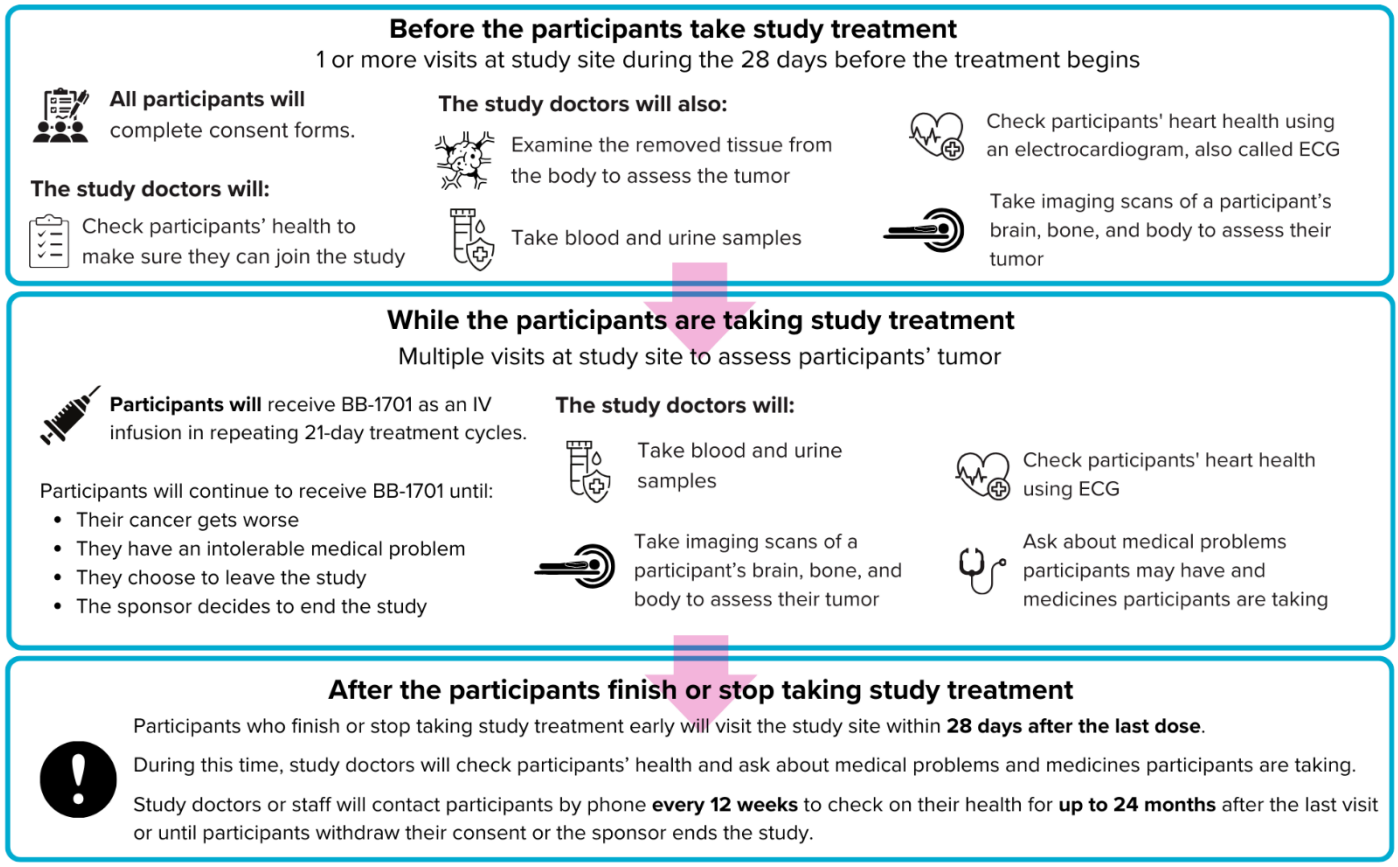
What will happen during the study?

Before participants take part in the study, study doctors will explain the study to participants and answer any questions they may have.

This study has 2 parts:

- **Part 1:** Researchers want to know the dose of BB-1701 to be used in Part 2 of the study and learn about the safety of BB-1701.
- **Part 2:** Researchers want to learn how BB-1701 may work in participants with a specific type of BC.

The chart below shows what will happen in all parts of the study.



Who can and cannot take part in this study?

People can take part in this study if they:

- Are 18 years or older
- Have unresectable or metastatic BC that is HER2-positive or HER2-low
- Have previously received at least 1 and a maximum of 3 chemotherapies, including trastuzumab deruxtecan
- Are able to provide enough BC tumor tissue

People cannot take part in this study if they:

- Have previously received eribulin
- Have nerve damage, lung inflammation, or certain heart conditions
- Have other conditions that according to study doctors may prevent them from participating

These are just some of the main guidelines. Study doctors will check all guidelines to see if a person can safely join this study. Participation in this study is voluntary. Participants can leave the study at any time.

What are the potential benefits and risks of taking part in this study?

Potential Benefits (Advantages): BB-1701 may help to treat the participant's BC. The information collected in this study may help doctors learn more about BB-1701, which could help the participants and other people with BC.

Potential Risks (Disadvantages): BB-1701 may not help to treat the participant's BC, or they might have side effects from BB-1701. There may be additional risks, which are unknown and unexpected.

Definition of Terms

Term	Definition
Clinical benefit rate (or CBR)	The proportion of participants whose tumor has a complete (gone away), partial (shrunk in size), or stable (no change in size) response to treatment
Disease control rate (or DCR)	The proportion of participants who will have reduced (shrunk) or stable (no change) tumor size
Duration of response (or DOR)	How long from the first improvement (shrunk in size) of their tumor until it starts to get worse (increased in size)
Human epidermal growth factor receptor 2 (or HER2)	A protein involved in normal cell growth. When there is too much of this protein, it can lead to uncontrolled cell growth that is associated with certain types of cancer.
Metastatic cancer	Term used when cancer cells spread to other parts of the body
Objective response rate (or ORR)	The proportion of participants whose tumor has a partial (shrunk in size) or complete (gone away) response to treatment
Overall survival (or OS)	How long participants live after the start of treatment
Pharmacodynamics (or PD)	A medicine's effect to the body
Pharmacokinetics (or PK)	How a medicine is absorbed, modified, and removed from the body
Progression-free survival (or PFS)	How long participants live without their tumor getting worse after the start of treatment
Unresectable cancer	Term used when the cancer cannot be completely removed with surgery
Time to response (or TTR)	The length of time from the start of the treatment until the tumor starts to shrink in size
Treatment cycle	A period of treatment followed by a period of rest (no treatment) that is repeated on a regular schedule