A clinical study of vericiguat in people with chronic heart failure (MK-1242-035)

Protocol Title: A Pivotal Phase 3 Randomized, Placebo-controlled Clinical Study to Evaluate the Efficacy and Safety of the sGC Stimulator Vericiguat/MK-1242 in Adults With Chronic Heart Failure With Reduced Ejection Fraction

Why is this study needed?

Researchers are looking for other ways to treat people with **heart failure (HF)**. HF is a serious disease where the heart does not pump enough blood to the body. HF may be treated with a combination of medicines called **guideline-directed medical therapy (GDMT)**. People with **chronic (long-lasting) HF** may have a high chance of having other serious heart-related problems that can require a hospital stay or lead to death.

In this study, researchers want to learn if people who take a study medicine called **vericiguat** with GDMT have serious heart-related problems less often than people who take **placebo** with GDMT. A placebo looks like the study medicine but has no study medicine in it. Using a placebo helps researchers better understand the real effects of the study medicine.

Who will take part in this study?

About 6,000 adults with chronic HF will be in the study. They will be ages 18 years and older and:

- Take **GDMT** for HF
- Have not stayed in the hospital due to HF in the past 6 months
- Have not needed to be treated with a diuretic given through a needle into a vein for HF in the past 3 months. A diuretic is a medication that removes extra salt and water from the body.
- Do not have certain other heart problems besides HF

What treatments are being given?

People will have an equal chance of taking one of these treatments by mouth as a tablet once a day:

- **Vericiguat**, the study medicine, at a low, medium, or high dose
- **Placebo**

The people who take vericiguat will start taking the low dose (amount). Then, they will start taking the next higher dose on Day 14 and again on Day 28 depending on their blood pressure. Researchers may stop or lower the dose of vericiguat if a person has low blood pressure.

People will take their study treatment with GDMT.

How is this study designed?

Neither the people in the study nor the researchers will know which treatment a person is taking (double-blinded study). During the study, people will give blood samples, have a test to measure the heart's electrical activity (called an electrocardiogram or ECG), have physical examinations, and answer questions about how they are feeling.

People may be in the study for up to about 3 years.

What are the goals of this study and how will they be measured?

Main goal	How it will be measured
To learn how well vericiguat lowers the chance of serious heart-related problems compared to placebo	The average length of time from the start of treatment until a person stays in the hospital due to HF or is no longer alive due to a heart problem

Other goals	How they will be measured
To learn how well vericiguat lowers the chance of serious heart-related problems compared to placebo	The average length of time from the start of treatment until a person: • Is no longer alive due to a heart problem • Stays in the hospital for the first time due to HF • Stays in the hospital at any time due to HF • Stays in the hospital due to HF or is no longer alive due to any cause • Is no longer alive due to any cause
To learn about the **safety** of vericiguat and how well people **tolerate** it	During the study, the number of people who: • Had a serious adverse event (SAE) – SAE is a serious health problem that happens or worsens • Had certain non-serious adverse events (AE) – an AE is a health problem that happens or worsens • Had an event of clinical interest (ECI) – an ECI is a certain medical problem that researchers want to learn about

What are the possible benefits and risks?

People may or may not benefit from the treatment received during the study. This study has an external group of experts who oversee the overall risk and benefit. If this group of experts decides that the study treatment is not safe, the study can be stopped.

More information about the benefits and risks is in the protocol.