A clinical study of people with HIV-1 who take antiretroviral therapy and switch their treatment to a combination of doravirine and islatravir (MK-8591A-051)

Protocol title: A Phase 3, Randomized, Active-Controlled, Open-Label Clinical Study to Evaluate a Switch to Doravirine/Islatravir (DOR/ISL 100 mg/0.25 mg) Once-Daily in Participants With HIV-1 Who Are Virologically Suppressed on Antiretroviral Therapy

Why is this study needed?

Researchers are looking for new treatments for all people living with **HIV-1** (Human Immunodeficiency Virus Type 1). HIV-1 is the most common type of HIV, a virus that attacks cells of the immune system.

HIV-1 treatments, called **ART** (antiretroviral therapy), involve taking medicines to lower the amount of HIV-1 virus in the body. **Standard ART** helps people live longer but includes up to three medicines and may affect other health problems. New ART is needed that is safe and works well. In addition, new ART is needed that can be taken for a long time without creating or worsening other medical conditions and that does not interact with other medicine a person takes. The **study ART** combines 2 medicines and is taken once a day.

The purpose of this study is to see if **study ART** works as well as **standard ART** used around the world to treat HIV-1.

Who will take part in this study?

About 501 people with HIV-1 will take part in this study. They will be at least 18 years old and:

- Currently taking any standard ART
- Not have HIV-2

How is this study designed?

This study has 2 treatment groups. People will be randomly assigned to Group 1 or Group 2:

- Group 1 will take the study ART for 96 weeks (about 2 years)
- **Group 2** will continue to take their current **standard ART** for 48 weeks (about 1 year) and then **switch to the study ART** for the next 48 weeks (about 1 more year)

Twice as many people will be assigned to Group 1 than Group 2. A person will be in the study for about 2 years. Both the people in the study and the researchers will know which treatment a person is taking (open-label study).

A person will give urine samples, have blood tests and physical examinations, and answer sets of questions during the study.

What treatments are being given during the study?

People will receive study ART or standard ART. The **study ART** combines 2 medicines called **doravirine (DOR)** and islatravir (ISL). It's taken by mouth as 1 tablet once a day. Standard ART is a person's current ART before they began in the study.

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

Main goal	How it will be measured
To compare if the study ART works as well as the standard ART to treat HIV-1	At Week 48, the number of people who have an HIV-1 viral load of 50 copies or more in a milliliter (mL) of blood. A lower viral load of HIV-1 in the blood is better. The viral load is measured as the number of " copies " in a small amount of blood (1 mL).
To learn about the safety and how well people tolerate the study ART compared to standard ART	 By Week 48, the number of people who: Had an adverse event (AE). An AE is a health problem that happens or worsens during a study. Stopped ART due to an AE
Other goals	How they will be measured
To learn how well the study ART works to treat HIV-1 compared to standard ART	 At Week 48, the number of people who have an HIV-1 viral load of: Less than 50 copies Less than 200 copies
To learn how well the study ART works for people who began on standard ART and switched at Week 48 (Group 2)	 At Week 96, the number of people in Group 2 who have an HIV-1 viral load of: 50 copies or more Less than 200 copies Less than 50 copies
To learn how well the study ART works for people who started on the study ART (Group 1)	At Week 96, the number of people in Group 1 who have an HIV-1 viral load of: 50 copies or more Less than 200 copies Less than 50 copies
To learn if the number of immune system cells called CD4+ T cells has changed during the study. CD4+ T cells help fight HIV-1 infection	 The average change in the number of CD4+ T cells in the blood: Both Groups – measured from: Day 1 to Week 48 and Week 48 to Week 96 Group 1 – also measured from: Day 1 to Week 96
To learn if the study ART or standard ART stops working for people	The number of people who are changed from their ART because the ART stops working for them, measured at Week 48 and 96
To compare how the study ART and standard ART affect a person's cholesterol levels	The average change in a person's cholesterol levels from the start of the study to Week 48
To learn about the safety and how well people tolerate the study ART compared to standard ART	By Week 96, the number of people who:Had an AEStopped ART due to an AE

What are the possible benefits and risks?

People may or may not benefit from the treatment received during the study. This study has a Data Monitoring Committee that oversees the study's overall risk and benefit. If this committee decides that the study treatment is not safe or does not show benefit, the study can be stopped. More information about the benefits and risks is in the Investigator Brochure, Protocol, and Informed Consent documents.

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