Protocol Plain Language Summary

A clinical study of Lenvatinib, pembrolizumab and Transarterial Chemoembolization (TACE) in liver cancer (MK-7902-012)

Protocol Title: A Phase 3 Multicenter, Randomized, Double-blinded, Active-controlled, Clinical Study to Evaluate the Safety and Efficacy of Lenvatinib (E7080/MK-7902) with Pembrolizumab (MK-3475) in Combination with Transarterial Chemoembolization (TACE) Versus TACE in Participants with Incurable/Non-metastatic Hepatocellular Carcinoma (LEAP-012)

Why is this study needed?

Researchers are looking for new ways to treat **liver cancer** that cannot be cured and has not spread to other parts of the body. Liver cancer that cannot be removed by surgery may be treated by a standard treatment called Transarterial Chemoembolization **(TACE)**. TACE treats liver cancer by injecting chemotherapy into the blood vessels near the tumor and blocking blood supply to the tumor.

Researchers want to know if adding pembrolizumab and lenvatinib to TACE improves treatment for liver cancer. **Pembrolizumab** is an immunotherapy, which is a treatment that helps the immune system fight cancer. **Lenvatinib** is a targeted therapy, which works to control how specific types of cancer cells grow and spread.

The goal of this study is to learn if people who receive pembrolizumab, lenvatinib, and TACE compared to people who receive TACE:

- Live longer without the cancer growing or spreading
- Live longer overall

Who will take part in this study?

About 450 people with liver cancer will be in the study. They will be at least 18 years old and:

- The liver cancer has not spread to other parts of their body
- The liver cancer cannot be cured with surgery, radiation, or a liver transplant

What treatments are being given during the study?

People will be assigned by equal chance to receive either of these treatments for up to 2 years:

- Pembrolizumab, lenvatinib, and TACE
- **Placebos and TACE:** A **placebo** looks like the study medicine but has no study medicine in it. Using a placebo helps researchers better understand if the study medicine works.

People will receive pembrolizumab through a vein by intravenous (IV) infusion every 6 weeks. People will take lenvatinib once a day by mouth. People will receive 4 treatments of TACE into blood vessels at least 1 month apart. People will receive 2 placebos: 1 through a vein by IV infusion every 6 weeks and 1 taken once a day by mouth.

How is this study designed?

People may be in this study for up to 8 years.

Neither the people in the study nor the researchers will know which treatment a person receives (double-blind study).

During the study, people may give urine and blood samples, have tumor and imaging tests, have physical examinations and answer questions about how they are feeling and their ability to carry out daily tasks.

Main goals	How they will be measured
To learn how long people who receive pembrolizumab, lenvatinib, and TACE live without their cancer getting worse compared to those who receive placebos and TACE	Progression free survival (PFS) : the length of time from the start of the study until a person's cancer gets worse or death from any cause.
To learn how long people who receive pembrolizumab, lenvatinib, and TACE live compared to those who receive placebos and TACE	Overall survival : the length of time that people live from the start of the study until death from any cause.
Other goals	How they will be measured
To learn how cancer responds in people who receive pembrolizumab, lenvatinib, and TACE compared to placebos and TACE	 Researchers will measure responses throughout the study: Objective response rate: the number of people whose cancer responds to treatment Disease control rate: the number of people who have the cancer stop growing or get smaller, or show no signs of cancer
To learn how long cancer responds in people who receive pembrolizumab, lenvatinib, and TACE compared to placebos and TACE	 The length of time from when people start the study until: PFS Duration of response: the length of time from when the cancer first responds to treatment until the cancer gets worse or death from any cause Time to progression: the time from the start of study until the cancer gets worse
To learn about the safety and how well people tolerate pembrolizumab, lenvatinib, and TACE	 The number of people who: Had an adverse event (AE) – An AE is a health problem that happens or worsens during a study. Stopped treatment due to an AE

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

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 that will oversee the overall risk and benefit. If this group of experts 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.