Protocol Plain Language Summary

A clinical study of pembrolizumab with radiotherapy in people with lung cancer (MK-3475-867)

Protocol title: A Phase 3, Randomized, Placebo-Controlled Clinical Study to Evaluate the Safety and Efficacy of Stereotactic Body Radiotherapy (SBRT) with or without Pembrolizumab (MK-3475) in Participants with Unresected Stage I or II Non-Small Cell Lung Cancer (NSCLC) (KEYNOTE-867)

Why is this study needed?

Researchers are looking for better ways to treat early-stage (stages 1 and 2) **non-small cell lung cancer (NSCLC)**. Early-stage NSCLC is most often treated with surgery to remove the cancer. Some people with NSCLC can't have or choose not to have surgery for a variety of reasons.

People who can't have or choose not to have surgery may be treated with a type of radiation therapy called **stereotactic body radiotherapy (SBRT)**. Radiation therapy is a treatment that uses beams of intense energy (like X-rays) to shrink or get rid of tumors.

Pembrolizumab is an immunotherapy, which is a treatment that helps the immune system fight cancer. Researchers want to know if people who receive pembrolizumab with SBRT live longer without NSCLC growing or spreading and live longer overall than people who received only SBRT.

Who will take part in this study?

About 530 people with NSCLC will be in this study. They will be ages 18 years and older and:

- Have stage 1 or stage 2 NSCLC that cannot be removed with surgery
- Have not had any other treatment for NSCLC

What treatments are being given during the study?

During this study, people will receive either:

- **Pembrolizumab** every 3 weeks for about 1 year **and SBRT**
- **Placebo** every 3 weeks for about 1 year **and SBRT**. A placebo looks like the study medicine but has no actual study medicine in it. Using a placebo helps researchers better understand the real effects of the study medicine.

All people will have SBRT about every 3 days for up to 2 weeks. Pembrolizumab and placebo are given through a needle into a vein as intravenous (IV) infusion.

How is this study designed?

Everyone in the study will have SBRT, and people will have an equal chance of receiving pembrolizumab or placebo. Neither the people in the study nor the researchers will know if a person gets pembrolizumab or placebo (double-blind study).

During the study, people may have tumor, blood, urine, and imaging tests, have physical examinations, and answer sets of questions about their health. People may be in this study for up to 7 years.

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

Main goals	How they will be measured
To compare **event-free survival** of people who receive pembrolizumab to people who receive placebo	The length of time that people are alive from the start of treatment until the cancer grows, spreads, returns, or death from any cause.
To compare **overall survival** of people who receive pembrolizumab to people who receive placebo	The length of time that people are alive after joining the study.

Other goals	How they will be measured
To compare **time until death or distant metastases** of people who receive pembrolizumab to people who receive placebo	The length of time that people are alive from the start of treatment until the cancer spreads to distant parts of the body (parts that are far away from the lungs) or death from any cause.
To learn about safety and how well people tolerate pembrolizumab	The number of people who: • Have an **adverse event (AE)** – An AE is a health problem that happens or worsens during a study • Stopped treatment due to an AE
To compare **quality of life** of people who receive pembrolizumab to people who receive placebo	People will answer questions about their overall health, cough, chest pain, shortness of breath, and ability to complete physical tasks. Researchers will compare quality of life before treatment and during the study.

What are the possible benefits and risks?

People in this study may not benefit from treatment, such as having the cancer stop growing or go away. This study has an external group of experts that oversees 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 benefits and risks may be found in the Investigator's Brochure, Protocol, and Informed Consent documents.