Protocol Plain Language Summary

A clinical study of V940 treatment and pembrolizumab in people with lung cancer (V940-002)

Protocol Title: A Phase 3, Randomized, Double-blind, Placebo- and Active-Comparator-Controlled Clinical Study of Adjuvant V940 (mRNA-4157) Plus Pembrolizumab Versus Adjuvant Placebo Plus Pembrolizumab in Participants with Resected Stage II, IIIA, IIIB (N2) Non-small Cell Lung Cancer

Why is this study needed?

Researchers are looking for new ways to treat people with **non-small cell lung cancer (NSCLC).** NSCLC is the most common type of lung cancer. People with early stage NSCLC often have surgery to remove the cancer. After surgery, some people receive more treatment to prevent cancer from returning **(adjuvant treatment)**, such as chemotherapy, immunotherapy, or both. **Pembrolizumab** is a standard treatment given after surgery to prevent NSCLC from returning. Pembrolizumab is an immunotherapy, which is a treatment that helps the immune system fight cancer.

Researchers want to learn if **V940 (study treatment)** can help prevent NSCLC from returning after surgery. V940 is a type of treatment that uses the genes in cancer to teach the immune system to fight the cancer. This is done using a mRNA (messenger ribonucleic acid) injection.

The goal of this study is to learn if people who receive V940 and pembrolizumab are alive and cancer free longer than those who receive placebo and pembrolizumab. A **placebo** looks like the study treatment but has no study treatment in it. Using a placebo helps researchers better understand if the study treatment works.

Who will take part in this study?

About 868 people with NSCLC will be in the study. They will be 18 years old and older and:

- Had surgery to remove NSCLC followed by at least one dose of chemotherapy
- No signs of cancer when they join the study
- Not have had radiation therapy or certain other cancer treatments for NSCLC

What treatments are being given during the study?

People will have an equal chance of receiving either:

- **V940** (study treatment) and **pembrolizumab**
- **Placebo** and **pembrolizumab**

V940 or placebo will be given as an injection (shot) into the muscle every 3 weeks for about 7 months.
Pembrolizumab will be given through a needle into a vein as an infusion every 6 weeks for about 1 year.

How is this study designed?

A person may be in this study for up to 12 years including follow-up time. Neither the people in the study nor the researchers will know what treatment they are assigned to (called a **double-blind study**). During the study, people will give blood, urine, and tumor samples, have imaging tests and physical examinations, and answer questions about their health.

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

Main goal	How it will be measured
To learn if people who receive **V940** and pembrolizumab have longer **disease-free survival (DFS)** compared to people who receive placebo and pembrolizumab	**DFS** is the length of time that people are alive and cancer free after starting treatment

Other goals	How they will be measured
To learn if people who receive **V940** and pembrolizumab have longer **overall survival (OS)** compared to people who receive placebo and pembrolizumab	**OS** is the length of time that people live from the start of treatment until death from any cause
To learn about the **distant metastasis-free survival (DMFS)** of people who receive **V940** and pembrolizumab compared to people who receive placebo and pembrolizumab	**DMFS** is the length of time that people live from the start of treatment until either the cancer spreads from where it started to other parts of the body, or death from any cause
To learn about the **lung cancer specific survival (LCSS)** of people who receive **V940** and pembrolizumab compared to people who receive placebo and pembrolizumab	**LCSS** is the length of time that people live from the start of treatment until death from lung cancer
To learn about the **quality of life (QoL)** of people who receive **V940** and pembrolizumab compared to people who receive placebo and pembrolizumab	People will answer questions to measure their QoL, including questions about their overall health, ability to carry out daily tasks, and certain NSCLC symptoms. Researchers will measure the change in scores during the study.
To learn if **V940** is safe and how well people tolerate it	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 possible benefits and risks?

Clinical studies may have benefits and risks. People may benefit because the study treatment may treat cancer or stop it from getting worse. There may be risks because the study treatment may not work or may cause health problems. V940 is new and the possible benefits and risks may not all be known. Some people in the study may feel discomfort at the injection site and some people may need to have a biopsy. A biopsy takes a sample of tissue from the body for testing. 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 will be stopped. More information about the benefits and risks is in the Protocol.