Protocol Plain Language Summary

A clinical study of pembrolizumab and olaparib in people with advanced ovarian cancer (MK-7339-001)

Protocol title: A Randomized Phase 3, Double-Blind Study of Chemotherapy With or Without Pembrolizumab Followed by Maintenance With Olaparib or Placebo for the First-Line Treatment of BRCA non-mutated Advanced Epithelial Ovarian Cancer (EOC) (KEYLYNK-001 / ENGOT-ov43 / GOG-3036)

Why is this study needed?

Researchers are looking for better ways to treat **advanced epithelial ovarian cancer (EOC)**:

- **EOC** is cancer that starts in cells that cover the outer layer of the ovaries
- **Advanced** means cancer has spread in the body or cannot be completely removed with surgery

People with EOC are usually treated with **debulking surgery**, which removes as much of the cancer as possible. After surgery, they receive **standard treatment** with chemotherapy and may receive bevacizumab. **Chemotherapy** is medicine that destroys cancer cells or stops them from growing. Bevacizumab is a medicine that stops the cancer from growing blood vessels.

Researchers want to learn about the safety and effects of **pembrolizumab** and **olaparib**, the **study treatments**, in people with EOC. **Pembrolizumab** is an immunotherapy, which is a treatment that helps the immune system fight cancer. **Olaparib** is a targeted therapy, which is a treatment that interferes with the growth and spread of cancer cells.

The goal of this study is to learn if people who receive one or both study treatments and chemotherapy live longer without the cancer getting worse than people who receive chemotherapy alone.

Who will take part in this study?

About 1,284 people with EOC will be in this study. They will be 18 years old and older and:

- Had or can have debulking surgery to remove EOC
- Do not have a mutation (change) in BRCA1 or BRCA2 genes, which may make them more likely to get breast cancer

What treatments are being given during the study?

People will receive 3 of these treatments:

- **Chemotherapy**, with or without bevacizumab, standard treatment
- **Pembrolizumab**, study treatment
- **Olaparib**, study treatment
- **Placebo**, which looks like the study treatment but has no study treatment in it. Using a placebo helps researchers better understand if the study treatment works.

People will receive chemotherapy through a needle into a vein as an intravenous (IV) infusion every 3 weeks for about 4 months. Researchers may choose different schedules or types of chemotherapy.

People will receive pembrolizumab or its placebo as an IV infusion every 3 weeks for up to 2 years.

People will take olaparib or its placebo twice a day by mouth as a tablet for up to 2 years. Some people may continue olaparib for more than 2 years with researcher approval.

How is this study designed?

People will have an equal chance of being assigned to 1 of 3 groups:

- **Group 1** will receive chemotherapy and pembrolizumab, then olaparib
- **Group 2** will receive chemotherapy and pembrolizumab, then placebo by mouth
- **Group 3** will receive chemotherapy and placebo as an IV infusion, then placebo by mouth

This study will have 3 phases:

1. **Lead-in phase**: People will receive 1 treatment of chemotherapy
2. **Treatment phase**: People will receive 5 more treatments of chemotherapy and begin pembrolizumab or placebo as an IV infusion. Some people may have debulking surgery.
3. **Maintenance phase**: People will finish pembrolizumab or placebo as an IV infusion, then take olaparib or placebo by mouth.

Bevacizumab may be given based on researcher choice and local standard of care.

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

During the study, people will give urine and blood samples, have tumor and imaging tests, physical examinations, and answer questions about how they are feeling.

After the treatment phases, researchers will follow-up with people and people may have more imaging tests. People may be in this study for up to 6 years.

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

Main goal	How it will be measured
To learn the if the **progression free survival (PFS)** of people who receive pembrolizumab and chemotherapy with or without olaparib is longer than those who receive chemotherapy alone	**PFS** is the length of time from the start of treatment until a person's cancer grows or spreads, or death from any cause. • This will be measured in all people and people whose tumors have **PD-L1** – PD-L1 is a type of protein found on cancer cells that can help the cancer hide from the immune system
Other goals	**How they will be measured**
To compare the **overall survival (OS)** of people who receive pembrolizumab and chemotherapy with or without olaparib to those who receive chemotherapy alone	**OS** is the length of time that people live from the start of treatment until death from any cause
To compare the **PFS** of people who receive pembrolizumab and chemotherapy with or without olaparib to those who receive chemotherapy alone	**PFS** will be measured in all people and people whose tumors have PD-L1 in more ways: • By different experts not related to the study • After people stop study treatment and get more treatment
To learn about the **safety** and how well people **tolerate** pembrolizumab and chemotherapy with olaparib	The number of people who: • Had an **adverse event (AE)** – an AE is a health problem that happens or worsens during a study that may or may not be related to study treatment • Stopped treatment due to an AE

To compare the **quality of life (QoL)** of people who receive pembrolizumab and chemotherapy with or without olaparib to those who receive chemotherapy alone	During the study, people will answer questions to measure their **QoL**, including questions about how they are feeling, EOC symptoms, and their ability to carry out daily tasks**.** Researchers will measure: • The change in the scores during the study • The length of time from the start of the study until people's QoL gets worse
To compare the **length of time until people need more treatment, stop study treatment, or death** in people who receive pembrolizumab and chemotherapy with or without olaparib to those who receive chemotherapy alone	Researchers will measure the length of time from when a person starts the study until they: • Start a next treatment for EOC (after stopping study treatment) or death from any cause • Start a second different treatment for EOC or death from any cause • Stop study treatment or death from any cause
To compare the **pathological complete response (pCR)** of people who receive pembrolizumab and chemotherapy with or without olaparib to those who receive chemotherapy alone	**pCR** is the number of people whose tumors and lymph nodes removed during debulking surgery in treatment phase 2 have no signs of cancer

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 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.