Protocol Plain Language Summary

A clinical study of the V116 vaccine for adults who have an increased risk for invasive pneumococcal disease

Protocol title: A Phase 3, Randomized, Double-blind, Active Comparator-controlled Clinical Study to Evaluate the Safety, Tolerability, and Immunogenicity of V116 in Pneumococcal Vaccine-naïve Adults 18 to 64 years of Age With Increased Risk for Pneumococcal Disease

Why is this study needed?

Researchers are looking for new vaccines to prevent **invasive pneumococcal disease** (**IPD**). IPD is a group of serious infections caused by the bacteria *Streptococcus pneumoniae*. IPD includes sepsis (blood infection) and meningitis (infection in the tissues that cover the brain and spinal cord). There are many different types of *Streptococcus pneumoniae* bacteria, called **serotypes**. Pneumococcal vaccines contain small parts of the bacteria that will not cause an infection but will help the body create **antibodies** (proteins) to fight the bacteria.

PCV15 (pneumococcal 15-valent conjugate vaccine) and **PPSV23** (pneumococcal vaccine, polyvalent [23-valent]) are 2 vaccines given as shots to prevent IPD in adults who are at increased risk (chance) of IPD. Adults at increased risk of IPD include people who smoke, drink a lot of alcohol, or have certain chronic (long-term) diseases.

V116 (pneumococcal 21-valent conjugate vaccine) is a new vaccine given as a shot being developed to help protect against the IPD infections that are most common in adults.

Researchers want to know if V116 is safe and helps the body make antibodies to fight the bacteria that can cause IPD.

Who will take part in this study?

About 500 people who are 18 to 64 years old will take part in this study. They will:

- Not have received any vaccine to prevent IPD after the age of 5 years
- Have a chronic disease that makes them at increased risk of IPD, such as diabetes or a long-term heart, kidney, liver, or lung disease

What vaccines are being studied?

Researchers will compare V116 vaccine to PCV15 and PPSV23 vaccines in this study. People will be assigned by chance to get one of these injections (shots):

- **V116** on day 1 of the study and then a **placebo** 8 weeks later. A placebo is a look-alike substance that does not contain any active vaccine.
- **PCV15** on day 1 of the study and then **PPSV23** 8 weeks later

How is this study designed?

A person will be in the study for about 6 months. Three times as many people will get the study vaccine (V116 vaccine and placebo) than PCV15 and PPSV23 vaccines.

Neither the people in the study nor the researchers will know which vaccines a person is assigned (called a double-blind study). A placebo will be given to people who are assigned to V116 so every person will get the same number of shots.

People may have blood tests and physical examinations, and answer questions before, during, and after they get the vaccines.

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

Main goal	How it will be measured
To learn if **V116** is **safe** and how well people manage (tolerate) the vaccine	• Number of people who have certain **adverse events (AEs)** up to 5 days after getting any of the study vaccines. An AE is any health problem that happens during a study. These AEs include: ○ Problems anywhere in the body, including muscle aches, headache, and tiredness ○ Problems in the area where people got the vaccines, including pain, redness, or swelling • Number of people who have a **serious adverse event** (SAE) up to 6 months after getting V116 or PCV15 that the researchers think may be related to the study vaccine. SAEs are serious health problems that happen during a study or existing health problems that worsen during a study.
To learn how well the immune system responds to the vaccines by making antibodies to fight each serotype	A blood test 30 days after getting V116 or PPSV23 to check how well the body makes antibodies

Other goals	How they will be measured
To learn the levels of each antibody in the blood	A blood test 30 days after getting V116 or PPSV23 to measure the average level of each antibody
To learn about the change in the level of antibodies and how well each type of antibody protects against the serotype	Differences in people from before treatment to 30 days after getting the V116 vaccine or PPSV23 vaccine, including: • The change in: ○ the average level of each antibody ○ the ability of antibodies to fight each serotype • The number of people who have: ○ 4 times higher levels of each antibody ○ 4 times or higher ability of antibodies to fight each serotype

What are the possible benefits and risks?

People may or may not get IPD after getting the V116 vaccine. 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 for a person is available in the Investigator Brochure, Protocol, and Informed Consent documents.