INFORMATION & CONSENT FORM

RESEARCH TITLE:	A Randomized, Observer-Blind, Placebo-Controlled, Phase 2/3 Study to Assess the Safety, Efficacy, and Immunogenicity of a Recombinant Coronavirus-Like Particle COVID-19 Vaccine in Adults 18 Years of Age or Older
SHORT TITLE:	A randomized controlled study, assessing the safety and immunogenicity of a COVID-19 vaccine in adults
PROTOCOL NUMBER:	CP-PRO-CoVLP-021
RESEARCHERS:	
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FUNDER:	Medicago R&D Inc.
SPONSOR:	Medicago R&D Inc. 1020 route de l'Église, bureau 600 Québec (QC), Canada G1V 3V9

Introduction

You are being asked to take part in this research study to assess the safety and ability of an investigational study vaccine to generate an immune response against the virus causing COVID-19 disease. You can decide if you want to take part in this study or not. Your choice will not change the quality of care that you will receive outside of this study. Please take time to read the following information about the study. Feel free to ask the study staff any questions that you may have.

Informed consent means agreeing to take part in a research study, but only when you fully understand what this means for you. You sign this informed consent form only if you agree to take part in this study. Signing the form shows that you have understood what this means for you and that you want to take part. Before you decide to join a study, you can discuss everything you heard from the study staff with your family, friends and other people you trust. Consent is an ongoing process and we will verbally reconfirm that you want to continue participating in the study at each follow-up contact.

New vaccines need to be tested and then approved by health agencies. First the vaccine is tested in a laboratory. If it is safe, doctors test how well the vaccine works in studies with people. That is called a research study. Several

research studies are needed to see if the vaccine is safe and useful when given to people. National health agencies look at the results of the studies. If they approve the vaccine, then it can be given to many people outside of research studies.

This is a Phase 2/3 COVID-19 vaccine study. Health Canada has issued an approval letter to the Sponsor, authorizing the research study to be conducted in Canada but the study vaccine has not yet been approved for sale or widespread use. A vaccine study is outside the normal care that you would receive and has increased monitoring than would normally occur.

Why are the researchers doing the study?

Coronaviruses are a large family of viruses found mostly in animals. In humans, they can cause diseases ranging from the common cold to more severe diseases such as Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS). A new coronavirus was identified in an outbreak that began in Wuhan, China, in December 2019. The virus has been named SARS-Cov-2, and the infectious disease caused by the virus has been named COVID-19.

The most common symptoms of COVID-19 are fever, tiredness, and dry cough. Some patients may have aches and pains, nasal congestion, sore throat or diarrhea. These symptoms are usually mild, and most people recover from the disease without needing special treatment. However, seniors, people with weakened immune systems, and people with underlying medical problems like asthma, heart problems or diabetes, have a higher risk of developing serious complications or dying from COVID-19. The World Health Organization (WHO) quickly declared COVID-19 as a pandemic due to the rapid increase in the number of cases globally. Researchers around the world are studying the virus and its effects, and working on ways to fight it, including potential vaccines.

Vaccines are one way to protect against disease. Vaccines work by preparing the immune system, the system in your body that fights disease, to react quickly against germs, such as viruses or bacteria, should they ever enter the body in the future. Vaccines trigger the body's defenses to produce disease-fighting antibodies. If a germ enters the body, the immune system will be prepared for it. The immune system will be able to destroy the germ before it can do harm.

Medicago has developed a vaccine that is made using a relatively new technology based on tobacco plants (not the same as the plants used to make cigarettes, but from the same plant family). This type of plant is used because a lot is known about the plant. It is used to help make drugs and vaccines.

The study vaccine in this study is made by producing one of the SARS-CoV-2 (COVID-19) virus proteins, the spike (S) protein. This protein is one of the ways the body recognizes the virus. When we make the protein (called the manufacturing process) the S proteins spontaneously form so-called virus-like particles (VLPs) that are about the same size as SARS-COV-2 and look very similar to the real virus. The study vaccine is referred to as "CoVLP vaccine". CoVLP vaccine is experimental, which means that it has not yet been approved for sale by regulatory authorities like Health Canada or the US Food and Drug Administration (FDA). You cannot get COVID-19 infection from being vaccinated with the VLPs because they do not contain any viral genetic material or DNA. Like other types of vaccines, when the CoVLP vaccine is injected into the body, VLPs are recognized by your immune (defense) system as foreign particles, and your body will produce antibodies and other defenses (cells) against the VLPs that are very similar to those made against the real SARS-CoV-2 virus (called the immune response). These antibodies and defensive cells may help to protect you if you are exposed to the real virus. This protection is called the immune response.

How will the researchers do the study?

This study will be performed in two portions, Phase 2 and Phase 3, with the purpose of gathering information on the safety (side effects), tolerability, effectiveness, and immune response of two injections of the CoVLP vaccine given at a single dose level combined with AS03. AS03 is a vaccine "adjuvant". An adjuvant is an added ingredient that may enhance your body's immune response to the vaccine. Depending on the timing of your enrollment in this study, you will participate in the Phase 2 or in the Phase 3 portion of this study. This consent for is for Phase 2 only.

In the Phase 2 portion, a total of about 612 male and female participants who are 18 years of age and older will be enrolled at multiple sites in North America. There will be approximately 10 sites in Canada and 5 sites in USA. Approximately 32 participants will be enrolled at the Canadian Center for Vaccinology (CCfV) located at the IWK Health Centre in Halifax, NS.

Participants will receive a dose level of 3.75 micrograms [µg] of the CoVLP vaccine combined with the adjuvant AS03 or placebo. A placebo is a saline solution (water and salt) that does not contain the vaccine.
This is an observer blinded study. This means that neither the doctor nor you will know or be able to choose which vaccine group you receive. The study nurse who gives that vaccine will know which vaccine you receive. You will only be told after the study is finished or in case of an emergency. This way, the results from the different groups will be handled in the same way.

This is a randomized study. Randomized means that your vaccine group will be chosen at random (like rolling a dice). You may be put into one of these two study groups. Each participant has five chances out of six (83 %) to receive the CoVLP vaccine, and one chance out of six (17 %) to receive the placebo. Each participant will receive two injections of the same experimental study treatment 21 days apart, in the upper arm muscle (called the deltoid muscle).

For all participants except healthy adults between the ages of 18 to 64 years, the CoVLP vaccine and placebo will initially be given to a small number of participants. The Independent Data Monitoring Committee (IDMC; a team of safety experts) will review the safety data and provide a recommendation about whether it is safe to continue enrollment before the remaining participants will be given the CoVLP vaccine. The same process will be followed for the second injection of the CoVLP vaccine. If there is a concern with the safety of the CoVLP vaccine at any time during the study, you will be informed by the study doctor and the continuation of the study or your continued participation in the study will be discussed with you.

In the Phase 3 portion, a total of about 30 000 male and female participants who are 18 years of age and older will be enrolled at multiple sites in North America and possibly Europe and/or Latin America.

How do I know if I can be in the study?

You can take part in this study if:

1. You are at least 18 years of age or older.
2. You are available for all the study visits.
3. You are in good health.
4. You have never tested positive to COVID-19.
5. Your body mass index (BMI), a ratio measurement of your height and weight, is between 18 and 30.
6. Your physical examination and blood test at the screening visit are within normal limits.
7. You agree to practice adequate contraception (birth control) if you are of child-bearing potential (able to get pregnant).

You can take part in the study even if you have tested positive to COVID-19, both negative and positive participants will be enrolled in the study.

There are other study criteria that will be reviewed at the screening visit to determine if you are eligible or not.

What will I be asked to do?

Your participation in the study will involve nine planned visits to CCfV over approximately 14 to 16 months. The will include a screening visit to make sure you are eligible to participate, two vaccination visits (Day 0 and Day 21), four clinic follow-up visits (Day 3, Day 24, Day 42, Day 128 and Day 201), and the final follow-up visit at the end (Day 386). The visits will last from 1-2 hours in duration. In addition, you will be contacted by telephone one day (Day 1 and Day 22) and eight days (Day 8 and Day 29) after each vaccination. After the Day 42 visit, you will be contacted weekly by your preferred method for the monitoring of any COVID-19-related symptoms of interest. If you have such symptoms, you will be asked to come back for one or more additional study visits.

Before any study activities are performed, you will be asked to review and sign this information and consent form. This will indicate that you understand your involvement and the risks of participating in the study, and that you agree to take part in and comply with all study activities. You will receive a signed copy of it to keep. We will verbally reconfirm that you want to continue participating in the study at each follow-up contact.

If you consent to participate in the study then there will be a screening visit to make sure you are eligible to take part in the study. The screening visit occurs within 14 days before the first vaccine visit. The time commitment for the screening visit will be approximately 1 hour.

At the screening visit, you will be asked about your medical history; such as previous allergies, illnesses and all medications you are currently taking to ensure that you are eligible to participate in the study. If you are a female who can get pregnant, you will be asked about your method of birth control. You will have a blood sample taken to confirm that you are not pregnant.

If you are enrolled in this study then it will be your responsibility to attend your scheduled appointments, to keep the study staff informed of any problems or side effects that you experience while in the study and report any new medications you are taking, to fill out the Diary you are given and return to the study staff, to use an acceptable method of birth control, and to ask the study staff any questions as you think of them.

Table of Study Procedures

Visits	**Visit 1** ***Screening***	**Visit 2**	***Phone Call #1***	**Visit 3**	***Phone Call #2***	**Visit 4**	***Phone Call #3***	**Visit 5**	***Phone Call #4***	**Visit 6**	**Visit 7**	**Visit 8**	**Visit 9**
Study Day	Day -14 to 0	Day 0	Day 1	Day 3	Day 8	Day 21	Day 22	Day 24	Day 29	Day 42	Day 128	Day 201	Day 386
Time (minutes)	45-60	60-75	5-10	15-30	5-10	15-30	5-10	60-75	5-10	15-30	15-30	15-30	15-30
Informed Consent	X												
Medical History	X	X	X	X	X	X	X	X	X	X	X	X	X
Review Medications	X	X	X	X	X	X	X	X	X	X	X	X	X
Physical Exam & Vital Signs	X	X		X		X		X		X	X	X	X
Pregnancy Test* (if applicable)	X	X				X				X			
Urine Sample	X			X		X		X					
Blood Sample Approx. (mL)	X (13)	X (50)		X (8)		X (58)		X (8)		X (50)	X (10)	X (50)	X (50)
Vaccination		**X**				**X**							
30 minute wait		X				X							
Receive Diary		X				X							
Review Diary			X	X	X		X	X	X				
Return Diary						X				X			
Receive Memory Aid										X		X	
Review/Return Memory Aid											X	X	X
Days 42-386		- Weekly contacts (email or phone call) to monitor for COVID-19 symptoms											
COVID-19 Illness Visit		- Complete COVID-19 Diary to record symptoms and treatment - 2 nasal/nasopharyngeal (NP) swabs collected at CCfV - Self-collected nasal/NP or buccal (cheek) swabs at home every day until symptoms resolve											

*Pregnancy test at screening will be a blood sample and at Visits 2, 6 & 6 will be urine samples.

Screening Visit Procedures

Blood samples - You will be asked to provide a blood sample at the screening visit to see if you are eligible for study. The blood tests will be a CBC (complete blood count, including your hemoglobin), kidney and liver function (ALT, AST, BUN, creatinine), glucose and cholesterol to see if they are in the normal range. You will need to fast (not eat) 12 hours before the sample.

You will be tested for Hepatitis B Virus (HBV), Hepatitis C Virus (HCV) and the Human Immunodeficiency Virus (HIV). If the results of your blood tests are positive they must be reported to public health officials.

In addition, a blood sample for a SARS-CoV-2 (COVID-19) antibody test will be taken see if you have been infected with the SARS-CoV-2 virus. You can take part in the study even if you have test positive to COVID-19, both negative and positive participants will be enrolled in the study.

The total amount of blood collected at this visit is 8 mL (approximately 1 ⅗ teaspoons).

Urine Sample Collection - A urine sample will be collected for routine laboratory tests to check for any changes in your overall health at the screening visit and during the study (at Day 3, Day 21, and Day 24).

We will tell you the results of the screening process and whether you are eligible to participate in the study or not. If any of the screening results are outside the normal range you will be informed and you will not be able to take part in the study. The study doctor will meet with you to explain the results if they are outside the normal range. The screening results may identify conditions or illnesses that you were not aware of. This information could be concerning to you and might have implications for your health or as with any pre-existing health condition, your ability to get additional private health insurance (i.e. beyond Canadian Medicare) in the future. We will ensure that you have appropriate follow up care and if you give us permission, we will notify your family physician.

Pregnancy Test/Birth Control - The possible effects of the CoVLP vaccine on embryo, fetus or nursing infants are unknown at this time. Therefore, there may be unknown risks to you, the embryo, fetus or nursing infant if you are or become pregnant during the study. There may also be unknown risks if you are breastfeeding during the study.

A blood test will be taken at screening to confirm that you are not pregnant and then follow-up urine pregnancy tests before each vaccinations on Day 0 and Day 21 and on Day 42.

You cannot participate if you are, or plan to become pregnant, or if you are, or plan to start breastfeeding. All female participants able to bear children must use a highly effective method of contraception from 30 days prior to vaccination (Day 0) up to at least 30 days after the last study vaccination; if the study were to end early, then you must not plan to become pregnant for at least 30 days after the early end of the study.

Effective contraception methods are:

- Combined (estrogen and progestogen containing) hormonal contraception associated with inhibition of ovulation:
  - Oral;

- Intravaginal;
- Transdermal;

- Progestogen-only hormonal contraception associated with inhibition of ovulation:
  - Oral;
  - Injectable;
  - Implantable;
- Intra-uterine device (IUD) with or without hormonal release;
- Credible self-reported history of heterosexual abstinence prior to and for at least 30 days after the last study vaccination;
- Female partner.

No one method of contraception is 100% effective. There may be a possibility that the study drug may lessen the effectiveness of a hormonal contraceptive agent. You should immediately inform your study doctor if you plan to change your method of birth control during the course of the study or if you become pregnant.

If you become pregnant during the course of the study, the study doctor or study staff will ask you questions about your pregnancy and will report it to the Sponsor without your name or any personal identifiable information.

Medical History – We will ask you questions about your previous medical history and any medication that you are taking to confirm that you are eligible to take part in the study.

Physical Exam - A physical exam will be done at the screening visit. The purpose of the physical examination is to assess your overall health and body systems. A physical exam includes examining your heart, lungs, abdomen, eyes, ears, nose and throat. As well as assessing other body systems such as the nervous and musculoskeletal (muscles and bones) systems.

Vital Signs - The research staff will measure your blood pressure, heart rate, breathing rate, and temperature at the screening visit and each follow-up study visit. In addition, your height and weight will be measured at the screening visit and at Day 0 (weight only).

Demographic information - We will collect information such as your date of birth, gender, race and ethnic background.

Follow-up Study Visit Procedures

If you are eligible and still agree to be in the study, we will schedule the vaccination visit. The following procedures will be done at the follow-up visits and calls:

Medical History - At each visit, the study staff will ask you questions about any changes in your health. We will also ask if you have taken any medications/received any vaccines.

Blood Samples – You will be asked to provide a blood sample at all the follow-up study visits. Some of the blood will be used to do common blood tests to make sure yours are within a normal range (approximately 8 mL or 2 teaspoons/sample); and some of the blood will be tested to measure your immune response (the level of special proteins in your blood (antibodies) that are created by your

immune system) against the novel coronavirus (SARS-CoV-2) (approximately 40 mL or 2 ¾ tablespoons/sample).

Vaccinations - You will be assigned to one of the study groups to receive either the two doses of study vaccine or two doses of placebo. The first dose will be given at Day 0 and the second dose will be given at Day 21. The vaccine or placebo will be given in the upper arm (deltoid) muscle of your non-dominant arm. After the vaccination, you will be asked to stay at the clinic for at least 30 minutes to monitor for any rare allergic reaction.

Contact Information - We will ask you to provide current contact information, including a phone number and an alternate contact. During the study, we will make a follow-up phone calls after each vaccine to ask about any symptoms you may be experiencing. We may also try to contact you to confirm follow-up visits or if you do not show up at a scheduled visit.

We will verify with you at each visit that your contact information remains current. We will verify again at the last visit so we can contact you in case we receive information important for your health, after you have completed the study.

Phone Calls - On Day 1, Day 8, Day 22, and Day 29, the study staff will contact you by phone to ask questions about how you are feeling. You will be asked to use your diary to provide information during the scheduled phone contacts.

You will be reminded to record your oral temperature, do your injection site measurements, and record the worst grade of the reaction in your diary. You will also be asked about any changes in your health or medications (including new medications) and reminded to record this information. You will also be reminded to bring in your diary to the clinical site visits.

Recording in the Diary or Memory Aid - You will be provided with a diary during the study. For the first seven days after each vaccination, you will be asked to carefully record (at roughly the same time each evening, once per day for seven days) the following information in the diary:

- Oral temperature, taken with the thermometer provided. You should not take your temperature immediately after drinking a hot or cold beverage or after smoking;
- Any redness and swelling, measured with the help of a special ruler, and/or any pain or other reactions at the vaccination site;
- Any general symptoms you experience, including headaches, muscle aches, joint aches, fatigue, chills, and any general feelings of discomfort or uneasiness (malaise);
- Any change in your neck or armpit lymph nodes.

At the Day 3, Day 21, Day 24, and Day 42 study visits, the study staff will review the information that you record(s) in the diary and may ask you questions about it.

If you report symptoms associated with COVID-19 during the surveillance period, you will be provided with a COVID-19 diary to record your COVID-19 symptoms daily until the resolution of the symptoms. In addition, you will be provided with memory aids. You will be asked to record any changes in your health after the first vaccination up to the Day 42 visit in the first memory aid. The second memory aid will be provided to you at the Day 42 visit. You will be asked to record the following information in your memory aid:

- From Day 43 to Day 201, any visits to a doctor, clinic, or hospital due to any illnesses;
- COVID-19-like symptoms;
- Other symptoms and associated medication use from Day 43 to Day 201.

You will record information after receiving the vaccination about your symptoms in a diary for 7 days, starting on day of vaccination, if you have any.

You will be asked to bring the memory aid to the Day 128 visit to review with site staff and return the memory aid at the Day 201 visit. The final memory aid will be provided to you at the Day 201 visit. You will be asked to record the following in your memory aid:

- From Day 202 to Day 386, any visits to a doctor, clinic, or hospital due to any illnesses;
- COVID-19-like symptoms;
- Other symptoms and associated medication use from Day 43 until the end of the study.

You will be asked to return the memory aid at the Day 386 visit. If you experience a severe reaction, if you visit an emergency room or are hospitalized, you will have to report it quickly to study staff by using the emergency contact number provided in this consent form. You may be asked to come to the clinic for evaluation.

Prohibited or Restricted Medication - If you agree to participate in this study, there are some restrictions on vaccines and medications that you cannot have received before the start of the study or should not receive near the time of study vaccination. You must not:

- Have received any other vaccine in the 14 days before the study vaccination or up to the Day 28 visit. This includes the influenza (flu) vaccine;
- Have received any other SARS-CoV-2 / COVID-19 or other experimental or approved coronavirus vaccine at any time prior to or during the study;
- Have used any prescription antiviral drugs with the intention of preventing COVID-19, including those that are thought to be effective for the prevention of COVID-19 but have not been approved by regulatory authorities for this indication (purpose), in the 30 days before the study vaccination or during the study;
- If you are healthy participant without any significant illnesses:
    - Have used any drug that can affect your immune system like systemic glucocorticoids (for example, prednisone) within one month before study vaccination;
    - Have used any other drugs that can affect your immune system like cytotoxic, anti-cancer, or immunosuppressant drugs within 36 months before study vaccination;
    - Have used any immunoglobulin preparations or blood products or blood transfusion within six months before study vaccination;
- Have used medication to prevent symptoms related to vaccination, such as antihistamines, acetaminophen / paracetamol, aspirin, naproxen, or ibuprofen, within 24 hours before each study vaccination and up to Day 7 after each vaccination.

You must not use any non-approved (that is, experimental) drug during the study. You will not be allowed to participate in another clinical trial while you are participating in this study.

It is not known if the vaccine used in this study could possibly interact with other medications, including over-the-counter medicines, herbal supplements, and vitamins. Please tell the study staff all the medications you are currently taking and that you might be taking during the study.

Surveillance Period COVID-19 Symptoms - Starting two weeks after the second vaccination and until the end of the study (an approximate duration of 52 weeks) you will be required to report any symptoms associated with COVD-19 (as explained on the day of vaccination and as described in the memory aid) you may be experiencing immediately to the study staff. Once you report this:

- The study staff will ask you about your symptoms, any medications you are taking, and whether you have visited a doctor, clinic, or hospital for these symptoms and remind you to record this information in your memory aid;
- The study staff will arrange an appointment with you to collect two nasal or nasopharyngeal swabs (a small swab that is into your nose and rotated). These swabs must be collected within 72 hours of your reporting. Information about any medication you are using and other symptoms will be collected during this visit;
- At this study visit, you will be trained on how to record your COVID-19 symptoms daily using a COVID-19 diary and how to collect self-administered nasal or nasopharyngeal or buccal (cheek) swabs (every other day) until the symptoms have resolved;
- If a study visit cannot be arranged, a home visit to collect the nasal or nasopharyngeal swabs may be arranged or you may be provided with self-administering nasal or nasopharyngeal swabs instead.

During the surveillance period, the study staff will regularly contact you (at least once per week) by your preferred method (phone or email,) to ask questions about how you are feeling, medications you are taking, symptoms associated with COVID-19, and visits to a doctor, clinic, or hospital. They will also remind you to record the information in your diary or memory aid

At each study visit we will ask questions to see if you have any symptoms suggestive of COVID-19. We will provide instructions on how to access CCfV to attend the study visits and whether or not you will be required to wear any personal protective equipment (PPE). If required, PPE will be provided. CCfV follows the guidance of the IWK Health Centre and Nova Scotia Public Health.

What are the burdens, harms, and potential harms?

Currently, the CoVLP vaccine has been administered as two doses at three different dose levels (3.75 µg, 7.5 µg and 15 µg) alone and in combination with two different adjuvants (AS03 or CpG1018) to 180 healthy male and female participants. The safety data collected to date from that clinical trial do not reveal any safety concerns about either the CoVLP vaccine alone or with either of the two adjuvants at any dose level.

The following side effects have been reported by 164 participants after receiving the second dose of their assigned treatment in that ongoing clinical trial:

Common side effects - Reported in more than 10 % of participants

• Pain at injection site;

• Swelling at the injection site;

• Headache;

• Fatigue;

• Muscle aches;

• Chills;

• General feeling of discomfort or uneasiness (malaise);

• Redness at site of injection;

• Fever.

Less common side effects: Reported between 1 % and 10 % of participants

• Joint pain;

• Swelling in the neck;

• Swelling in the armpits (axilla).

In this study, you will be monitored for local reactions such as redness, swelling, or pain at the injection site. You will also be monitored for side effects such as headache, muscle aches, joint aches, fatigue, chills, feelings of general discomfort or uneasiness, fever, and swelling in the neck, axilla (armpit), groin, and chest wall.

Although none of the candidate COVID-19 vaccines currently being tested in clinical trials have reported it thus far, there is a theoretical risk that vaccination could make SARS-CoV-2 infection more severe should you subsequently be exposed to the virus. This phenomenon is called vaccine enhanced disease, or immune-enhanced disease, or sometimes antibody-dependent enhancement of disease. Such worsening of the infection could theoretically occur at any time after vaccination (weeks to many months). The mechanism of vaccine-enhanced disease is not completely understood but the type of immune response induced by the CoVLP vaccine is thought to be unlikely to put you at risk for this complication. If you become infected with SARS-CoV-2 or experience any COVID-19-like symptoms despite being vaccinated, your health status will be evaluated carefully, and all necessary medical treatment will be made available to you. Because of this theoretical risk of vaccine-enhanced disease as well as the unknown effectiveness of the vaccine, participation in this study should not change your behavior regarding possible exposures to COVID-19 in any way. You should continue to exercise all reasonable caution (that is, physical distancing, use of a face mask, etc.) to avoid contact with infected individuals.

Other side effects might occur that have not been observed yet, so there may be risks that are unknown at this time. This is why we are asking you to note any side effects, good or bad, that you might experience during the study and report them to the study staff.

The vaccine that you get in this study will contain an '*adjuvant*'. An adjuvant is added to vaccines to enhance the immune response produced. People who have received vaccines that contain different adjuvants, have very rarely (up to 1 in 10 000 people) developed illnesses called "autoimmune diseases", which can sometimes be serious and lifelong. Autoimmune diseases may develop when immune cells that normally protect you from illness, attack your own organs instead. The same autoimmune illnesses can also develop in people who have not received these adjuvant-containing vaccines.

An increased risk of narcolepsy (a lifelong disease causing an overwhelming daytime drowsiness and sudden attacks of sleep) was observed in some individuals after vaccination with a flu vaccine containing AS03 (called Pandemrix™) during the H1N1 pandemic in 2009-2010. This study vaccine contains AS03. A similar risk of narcolepsy was not identified with other vaccines containing AS03. Currently available data suggest that the cases of narcolepsy seen immediately following the 2009/2010 pandemic in some people were most likely triggered by a reaction in those people to a protein from the flu virus itself which was used to manufacture the Pandemrix™ vaccine. Research is continuing to assess whether either of the main components of the 2009/2010 flu pandemic vaccine (for example, the viral proteins in the form used in the vaccine or the AS03 adjuvant) may have contributed to the reaction.

The AS03 adjuvant has been given to humans in other vaccine preparations approved by Health Canada. In studies involving the injection of AS03-adjuvanted vaccines into the arm, a small increase in pain at the injection site and general symptoms of muscle aches, headache and fatigue have been observed compared to the non-adjuvated vaccines or placebo in adult volunteers.

It is very important that you tell the study staff about any health problems you experience even if you think they were not caused by the vaccine. If a serious health problem occurs – for example, one that requires you to go to the hospital – you or a family member must tell the study doctor as soon as possible.

Throughout this study, an Independent Data Monitoring Committee (IDMC) will look at information about the health of the people taking part. Personal identifying information, like name or birthdate will not be provided to this Committee, only anonymized data will be shared. If at any time the Committee feels it is unsafe to continue the study, it might decide to pause or stop the study. The research staff will tell you any new information in a timely manner that could affect your willingness to take part.

Allergic Reaction
As with any vaccination, there is very rare possibility of an allergic reaction with sudden signs of allergy such as rash, itching or hives on the skin, swelling of the face, lips, tongue or other parts of the body, shortness of breath, wheezing or trouble breathing. If such a reaction occurs, it is usually almost immediately after the vaccination. This is why we require that you remain in the clinic on the site for at least 30 minutes so that we can provide immediate medical attention if needed. The study staff are fully trained and equipped to deal with this unlikely event.

Placebo
Since the placebo is like salt water, you will probably not have any reaction to it (other than discomfort related to the injection). However, this cannot be guaranteed.

Blood Sampling
When giving blood, you may have pain or tenderness, bruising, or rarely, an infection at the spot where the needle is inserted. Fainting or dizziness can occur after a needle stick, but this is uncommon.

Swabs
A swab is like a small Q-tip may be inserted into the nostril, back of your throat or cheek to take a small sample of mucus or cells. It takes a few seconds. It can be uncomfortable but is usually not painful.

Call the study staff right away if you have any side effects that you think are serious.

If you experience a serious adverse event, such as if you are hospitalized or have an emergency room (ER) visit for any reason, your medical records will be accessed to verify any diagnoses and establish potential causality. If you develop COVID-19 symptoms that require a swab to test for illness then the lab results will be obtained for your study records. By signing this consent form you are allowing this access.

What are the possible benefits?

There may or may not be any direct benefit for taking part in this research study. If you are randomized to receive the study vaccine, it is possible that your body may produce antibodies to the novel coronavirus SARS-CoV-2. If the vaccine does not work or if you receive the placebo, you may not receive a health benefit. Information gained from this study will help in the development of a vaccine against COVID-19.

If the study vaccine is proven to be safe and effective then it will be made available to you if you were in the placebo group and wish to receive the study vaccine.

What alternatives to participation do I have?

You do not have to participate in this study. This study is for research purposes only. You do not have to take part if you do not want to. Talk with your doctor about your options before you decide if you will take part in this study. The study doctor can advise you if you need more information.

Can I withdraw from the study?

Taking part in this study is entirely your choice. You may decide not to enroll or you may withdraw from the study at any time. Your choice will not affect your care in any way.

Your participation in this study is voluntary. During the study, you will be informed as soon as possible of any new information on the vaccine that may affect whether you want to continue participating in the study. You may refuse to participate, or you may discontinue your participation at any time without explanation. If you refuse to participate or if you end your participation, you will not be penalized or lose any benefits to which you are otherwise entitled. If you decide to discontinue your participation, please tell the study staff; they will ask you to complete the final study visit. If you decide to leave the study, the information about you or your sample(s) that was collected before you left the study will still be used. No new information or samples will be collected without your permission.

The study doctor or a designated study staff member may end your participation, without your consent, based on her/his medical judgement. The Sponsor and/or the study doctor might decide to end your study participation if you are not following the study requirements. If you are withdrawn from the study by the study doctor or study staff, the reason for your withdrawal will be explained to you. In addition, the Sponsor or the regulatory authorities may stop the study.

Will the study cost me anything, and, if so, how will I be reimbursed?

There will be no costs to you to take part in this study. You will receive $50 for the 9 scheduled in-person visit and $25 for each of the 4 scheduled calls. At the end of the study surveillance period you will receive $100. A parking pass will be provided at the end of each in-person visit if you park in the IWK parking garage.

You will receive the reimbursement in the form of a gift card at each in-person study visit for the visits/calls to that point. You will receive $650 total if you complete all the study visits.

If you require an unscheduled visit as part of this clinical study due to illness or to repeat a blood test you will receive $50 per visit.

Or if you prefer, payment can be made by cheque through Dalhousie University. You will be asked to sign a form to receive the cheque. If for any reason you do not complete the study, you will be compensated for the total number of visits completed up to that time and you will receive a cheque approximately 4-6 weeks after signing the form.

Are there any conflicts of interest?

There are no known conflicts of interest on the part of researchers and/or CCfV. Funding from the study funder will cover the costs of conducting the study at CCfV, and the study nurses and research assistants will be compensated for the time and expenses to conduct the study.

What about possible profit from commercialization of the study results?

The study sponsor (Medicago) will be the owner of the study results. They plan to use the results, and may get patents, sell the drug in the future, or make profits in other ways. You and the researchers will not be paid any part of this.

How will I be informed of study results?

The group study results and your individual results can be made available to you once the study is completed and reported. This may take many months after the study has been completed. The results will be mailed to you if you request to receive them. You will be asked to initial the last page of this form indicating if you wish to receive the results. It will be important that you notify us if there is any change in your address, so we are able to contact you with the study results.

What are my research rights?

Your signature on the form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the investigator(s), sponsors, or involved institution(s) from their legal and professional responsibilities. If you become ill or injured as a direct result of participating in this study, necessary medical treatment will be available at no additional cost to you. You are free to withdraw from the study at any time without jeopardizing the health care you are entitled to receive.

If you have any questions at any time during or after the study about research in general or your rights as a participant, you may contact the Research Office of the IWK Health Centre at 902-470-7879, Monday to Friday between 8 am and 4 pm.

How will my privacy be protected?

Your privacy rights are protected by Canadian Federal and Provincial laws under the "Personal Information Protection and Electronic Documents Act" (PIPEDA). This act requires Sponsors to get your permission to use health information about you that we either create or collect as part of this research study. This permission is called an Authorization.

All information obtained during this study will be kept strictly confidential, except where disclosure is required by law. Your name will be coded and the code list will be kept at the study site with limited access. In order to verify the research study data, monitor the study and ensure compliance with applicable regulation and laws, employees from the Sponsor (Medicago) or its contractual partners, inspectors from regulatory authorities such as the United States FDA, Health Canada, Quality

Assurance Officers of the study center, and IWK Research Ethic Board may review these records. Study data may be transferred outside to another country (for example, the USA) where regulations for the protection of such data may differ from your country. In order to complete important activities during the study (for example, data analysis), it is necessary that study data be transferred from one location to another location or from one group to another group. During the transfer of study data, your personal information will remain coded and will not contain your name or address or any information that directly identifies you, unless it is required by law. By signing this consent form, you agree to this access and transfer of data outside your country.

By signing this consent form, I acknowledge that the Study Team, Sponsor and/or Sponsor Representatives may need to examine, verify and reproduce any IWK records and reports, including the clinical data and medical history in my medical records (e.g. clinical diagnoses, laboratory and test results, radiology images, medications, discharge summary), that are necessary for the evaluation of the Study. In such cases, and once de-identified (i.e. there will be no personal identifiers linking the information to you), this information may be sent off site to Medicago R & D (Quebec City, Canada), Covance (Mumbai, Maharashtra, India) and Medidata Rave Imaging Platform. This de-identified information will be destroyed per each Organization's SOP.

A representative of the Sponsor may observe the study procedures during one or more study visits.
A description of this clinical trial will be available on https://www.clinicaltrials.gov, as required by U. S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

In Canada, information regarding this study will be posted on the Health Canada Clinical Trial Database website https://health-products.canada.ca/ctdb-bdec/index-eng.jsp. This database does not contain detailed information about the study or any information that can identify you.

If the results of this study are published, your identity will remain confidential. It is expected that de-identified information collected during this study will be used in analyses and will be published/presented to the scientific community at meetings and in journals. This de-identified information may also be used as part of a submission to regulatory authorities around the world to support the approval of drugs used in this research.

While every effort will be made to protect the privacy of your information, absolute confidentiality cannot be guaranteed. This does not limit the duty of researchers and others to protect your privacy. You may take away your permission to use and share health data about you at any time by contacting the study doctor. If you do this, you will not be able to stay in this study. No new health data that identifies you will be gathered after that date; however, health data about you that has already been gathered may still be used and given to others as described in this form.

Your study records, including confidential information collected during the study, will be kept in a secure location for at least 25 years after study completion, as required by Canadian clinical trial regulations.

Your family physician will be notified of your participation in the study so that your study doctor and your family doctor can provide proper medical care, if you provide consent for us to do this.

What will happen with your study samples?
Your blood samples will be sent to one or more central laboratories and to Medicago's laboratory for screening tests, safety tests, and testing of the immune response against the SARS-CoV-2 virus. No testing will be done on your DNA or genetic material. The samples will be identified only by a study code and none of your personal information will be made available to these laboratories.

Your nasal/nasopharyngeal/buccal swabs will be sent to one or more central laboratories to see whether your symptoms were caused by SARS-CoV-2 virus. No testing will be done on your DNA or genetic material. The test will be performed to identify the presence of a virus. The samples will be identified only by a study code and none of your personal information will be made available to these laboratories.

The samples will be stored for use because some immune tests are only now being developed. The samples may be used by Medicago or shared by Medicago with other companies or universities to better understand the vaccine or your immune system responses to the vaccine, or to further develop the CoVLP vaccine. The samples will be identified only by a study code and none of your personal information will be made available to these companies or universities. Collected samples may be stored for up to 15 years. Once the samples are no longer needed, they will be destroyed.

In addition, if you agree, your biological samples may be used by Medicago for further research that may or may NOT BE RELATED to the disease or the vaccines under study. This testing will be done on anonymized samples (meaning that any identification linking you to the sample is destroyed). You will be asked if you agree to this on the final consent page. This testing is optional and does not affect your participation in the study.

Contact for future studies
You will be asked at the end of the study if we can contact you for future Canadian Center for Vaccinology (CCfV) studies. If you agree to be contacted, it does not mean that you have to take part in future studies. If you do not want to be contacted we would like to know why. We will record your answer if you choose to give one. If you wish to be contacted, we will ask you to initial the signature page of this form to indicate this, and reconfirm this when you have completed the study.
If you still wish to be contacted at the end of the study, we will collect information that will include your name, address, phone number, email address and date of birth, which we store in a secure area. If you indicate you agree today and change your mind later, it is not a problem and will not impact your care in any way.

What if I have study questions or problems?
If you have any questions, contact the Research Nurse Coordinator, Cathy Brown, at 902-470-7015 or catherine.brown@iwk.nshealth.ca. You can reach her Monday to Friday between the hours of 8 am and 4 pm. **If you are calling after 4 pm, on the weekend, or on a holiday, please call 902-476-8837 to reach the on-call study nurse.**

If you have an urgent study matter, you may also reach Dr. Halperin by calling the IWK Health Centre at 902-470-8888 and asking for him to be paged.

In the event that participation in this study leads to any serious reactions or events, please contact your study nurse or coordinator as soon as possible. The matter will be reviewed with you and Dr. Halperin, who will assist you in obtaining appropriate medical care.

Study Title:
A Randomized, Observer-Blind, Placebo-Controlled, Phase 2/3 Study to Assess the Safety, Efficacy, and Immunogenicity of a Recombinant Coronavirus-Like Particle COVID-19 Vaccine in Adults 18 Years of Age or Older

Participant Consent
I have read or had read to me all pages of this information and consent form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks. I understand that my information and my samples will be used as described in this form. I understand that I have the right to withdraw from the study at any time without affecting my care in any way. I have received a copy of the Information and Consent Form for future reference. I freely agree to participate in this research study.

Name of Participant: (Print) _____

Signature: _____ Date: _____ Time: _____

I agree to have my leftover blood samples used by Medicago for further research that may or may NOT BE RELATED to the disease or the vaccines under study. I understand the testing will be done on anonymized samples (meaning that any identification linking me to the sample is destroyed).

❒ YES ❒ NO **Initial____**

I agree that the study staff has my permission to tell my primary care physician about my participation in this study.

❒ YES ❒ NO **Initial____**

I would like to receive a copy of the study results when available.

❒ YES ❒ NO **Initial____**

I agree to be contacted and given information about future studies.

❒YES ❒ NO **Initial____**

STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY
I have explained the nature and demands of the research study and judge that the participant named above understands the nature and demands of the study.

Name (Print):_____ Position: _____

Signature: _____ Date: _____ Time: _____

STATEMENT BY PERSON OBTAINING CONSENT
I have explained the nature of the consent process to the participant and judge that they understand that participation is voluntary and that they may withdraw at any time from participating.

Name (Print): _____ Position: _____

Signature: _____ Date: _____ Time: _____