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Study Title: A5370: Safety and Immunotherapeutic Activity of an Anti-PD-1 Antibody (Cemiplimab) in HIV-1-infected Participants on Suppressive cART: A Phase I/II, Double-blind, Placebo-controlled, Ascending Multiple Dose Study

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You are being asked to be in a research study. This form provides you with information about the study. A member of the research team will describe this study to you and answer all of your questions. Please read the information below and ask questions about anything you don't understand before deciding whether or not to take part.

Why is this study being done?

This study plans to learn more about the safety and immunotherapeutic activity of an experimental medication called Cemiplimab.

This study is being done to see if cemiplimab is safe in persons living with HIV and whether it can improve the HIV-specific immune response.

HIV medications can reduce HIV virus to very low levels in the blood and partially repair the immune system (the way your body responds to diseases). However, these medications do not cure (remove) the HIV and a small amount of the virus continues to live in the body even when the viral load (amount of HIV virus in your body) is very low. In most participants taking HIV medications, very sensitive tests can find small amounts of HIV virus in the blood even when regular viral load test results do not find HIV. This helps explain why the HIV virus levels come back when these medications are stopped. The reason why HIV can still be found in the body is likely because there are cells that live for a long time after becoming infected with HIV. These cells are thought to carry the HIV virus in a latent or hidden form ("non-active state"). As long as the virus exists in this latent, non-active state, persons living with HIV cannot be cured. HIV virus may come from these non-active cells that may at times produce low levels of HIV, or it may come from other cells in the body. The immune system does not seem to be able to get rid of these cells that produce virus. HIV medications are only able to block multiplying (active virus) cells.

Cemiplimab (LIBTAYO) is a drug approved by the Food and Drug Administration (FDA) to treat advanced cutaneous squamous cell carcinoma. It has been tested to treat various types of cancer. Cemiplimab is an antibody (a protein in the body that

finds infection) that has been created to help wake up cells in the immune system that do not function well. These cells are called exhausted (tired) T cells. One reason that the immune system does not clear the cells that produce low levels of HIV is that the cells that fight HIV are exhausted and do not work well. If these cells are able to wake up, it is possible that they can function better and help clear the cells infected with HIV.

The overall goals of this study are:

- To see if two doses of cemiplimab will be safe in persons living with HIV on treatment,
- To see whether there is improvement in the body's immune response to HIV,
- To see whether cemiplimab can lower the amount of HIV that is present in the blood and reduce the amount of latent HIV.

You are being asked to be in this research study because you are living with human immunodeficiency virus (HIV-1) and:

1. You have been taking the same combination of antiretroviral drugs (cART) for at least the past 3 months.
2. Your HIV-1 RNA level (viral load, the amount of HIV in your blood) has been below the limit of detection for the past 18 months.

Other people in this study

Up to 5 people from your area will participate in the study.

Up to 45 people around the country will be in the study.

What happens if I join this study?

If you join the study, you will receive two infusions of either the active form of cemiplimab or placebo (a salt solution with no medication). You have four out of five chances to receive the active medication and one out of five chances to receive placebo. You will be in the study for about 48 weeks.

There are 3 dose levels (amount of medication with each infusion) being used in this study to test safety and to look at whether the higher doses are better at improving the immune response to HIV. The doses for this study were chosen based on studies that were done in people with cancer who did not have HIV. The most important goal of this study is to test if cemiplimab is safe. The smallest and first dose of 0.3 mg/kg is much lower than the doses used in studies against cancer. The doses of 1 mg/kg and 3 mg/kg were chosen given their effectiveness in treating cancer in some cancer patients. In prior studies with cemiplimab, participants receiving the higher doses did not have more side effects than with lower doses.

Screening

After you have read and signed this informed consent form, and you would like to be in this study, you will come to the clinic for a screening visit to make sure you meet the requirements for joining the study. You will need to fast before this visit (fasting means that you have had nothing to eat or drink except plain water and required prescription medications for at least 8 hours before this visit). If you are not able to fast before this visit, you will be asked to reschedule your visit. This visit will take about 1-2 hours. At this visit:

- Whether you are living with HIV will be confirmed. If there is no record available, another HIV test will be done.
- You will be asked questions about your medical history and any medications you are taking or have taken in the past.
- You will have a complete physical exam, including vital signs (temperature, pulse, respiration rate [the number of breaths you take in a minute], and blood pressure), an eye exam, and height and weight.
- You will have about1/4 cup of blood drawn to see if you have tuberculosis in your body; for metabolic tests (to test how your body uses the food that you eat); autoimmune (studies to see if your immune system is attacking healthy cells in your body); studies for routine lab tests for safety; for virologic studies (to help study the virus); to measure the amount of HIV in your blood; and to measure your CD4+ and CD8+ cell counts (cells that help fight infection).
- If you are a woman and able to get pregnant, some of your blood or urine will be tested for pregnancy.
- If you are a woman, follicle stimulating hormone-release factor (FSH) will be measured if you are not able to get pregnant and you do not have a medical record that says this.
- You will agree to continue taking combination antiretroviral drugs as prescribed throughout the entire study.

Pre-Entry

- If you are eligible for the study, you will come in for a pre-entry visit. This visit will take about 1 hour. You will need to fast before this visit (fasting means that you have had nothing to eat or drink except plain water and required prescription medications for at least 8 hours before this visit). At this visit:
- Your height may be recorded.
- You will have about ½ cup of blood drawn for routine lab tests for safety; to see if you are living with the hepatitis B virus and/or you have been diagnosed with the hepatitis C virus (an infection of the liver); for metabolic tests (to test how your body uses the food that you eat); for virologic studies (to measure the amount of HIV in your blood); for immunologic studies (to test how your body fights infection); pharmacokinetic (PK) studies (to test how the study drug works in your body) studies; and for immunogenicity studies (to test your body's immune response). You will be told the results of these tests when they become

available. Some of the blood you provide will be stored for future protocol-required testing.
- You will have an electrocardiogram (ECG). An ECG is a test that checks for problems with the electrical activity of your heart.
- If you are a man, some of your blood will be tested to look at the amount of testosterone in your blood before receiving study treatment.

Entry

After your pre-entry visit, you will come in for an entry visit. This visit will take about 4 hours. At this visit:
- You will be asked questions about your medical history.
- You will be asked about your health and any changes in your medicines since your last visit.
- You will have a brief physical exam including vital signs and weight.
- If you are a woman and able to get pregnant, some of your blood or urine will be tested for pregnancy.
- You will provide a urine sample for a urinalysis to see if you have inflammation of the kidneys.
- You will have about ½ cup of blood drawn for routine lab tests for safety; virologic, immunologic, PK, and autoimmune (studies to see if your immune system is attacking the healthy cells in your body) studies; to measure the amount of HIV in your blood; and to measure your CD4+ and CD8+ cell counts. Some of the blood you provide will be stored for future protocol-required testing, including gene expression assays. Most of our cells have exactly the same genetic information (blueprint) but some of the information is turned off and some is turned on depending on the type of cell. This study will test gene expression (which genes are “on” and which genes are “off”) in lymphocytes (immune cells) before and after receiving the study medication.
- You will receive cemiplimab or placebo once during this visit through a small plastic flexible tube placed into a vein in your arm (intravenous [IV] infusion). This IV infusion will take about 30 minutes or in some cases the IV infusion may be slowed to help stop any side effects that you may have. At the entry visit, blood will be drawn to determine cemiplimab amounts in your body. This blood draw will happen right after the infusion.
- You will be asked questions about how well you take your HIV medications.
- You will be contacted by telephone 2 to 3 days after this visit in which you have received the study drug or placebo. Someone from the site will call you to see how you are doing and to ask you about any signs and/or symptoms you may have.

Study Medication

Depending on when you enter this study, you will be assigned to one of the three groups. In each group: 12 participants will receive cemiplimab and 3 participants will receive placebo salt diluent/solution that does not contain cemiplimab. You cannot choose whether you receive cemiplimab or placebo because you will be randomly

assigned (like flipping a coin), and neither you nor the study staff will know whether you will receive cemiplimab or the placebo.

- Group 1 will enroll first to receive cemiplimab 0.3 mg/kg or placebo. If this dose is found to be safe, then
- Group 2 will enroll to receive cemiplimab 1 mg/kg or placebo. If this dose is found to be safe, then
- Group 3 will enroll to receive cemiplimab 3 mg/kg or placebo. All participants will receive one dose of cemiplimab/placebo at entry and one dose of cemiplimab/placebo at week 6. However, the second dose at week 6 may not be given to you if any concerning side effects have occurred in you or in other participants enrolled in the study (see section "Risks of Cemiplimab" below). If this occurs, the study monitoring committee (SMC) will review this side effect and decide if it is safe for participants to continue with a second dose of cemiplimab/placebo.

If the second dose is delayed for any reason, you will still come in for your week 6 visit and all week 6 evaluations will be done, except you will not receive the second dose of cemiplimab/placebo. If the SMC decides it is safe for participants to receive a second dose, then another visit will be scheduled for you to receive this second dose. In this case, you may need to have your week 4 evaluations done again before scheduling your second dose.

You will not know whether you received cemiplimab or placebo until all participants have completed the study, unless this information is important to your care in an emergency.

Study Visits

After your entry visit, you will come to the clinic at weeks 1, 2, 4, 6, 7, 8, 10, 12, 16, 20, 24, 28, 36, and 48. Most study visits will last about 1 hour with the exception of your week 6 visit, which will last about 2 hours.

During Most Study Visits

- You will be asked about your health and any changes in your medicines since your last visit.
- You will have a brief physical exam including vital signs and weight (only done weeks 6, 12, and 48).
- You will have about1/3 cup of blood drawn to measure the amount of HIV in your blood, for future protocol-required testing, routine lab safety tests, and for immunologic and virologic studies. Some of this blood will be stored for future gene expression assays.
- You will have about 1.0 tablespoon (15 mL) of blood drawn for metabolic studies on weeks 4, 6, 12, 16, 20, 24, 28, 36, and 48. You will need to fast before these study visits (fasting means that you have had nothing to eat or drink except plain water and required prescription medications for at least 8 hours before these visits).

- You will have a little more than ½ tablespoon of blood drawn for autoimmune studies on weeks 4, 12, and 48.
- You will have a little more than ½ tablespoon of blood drawn and stored for autoimmune studies on weeks 6, 16, 20, 24, 28, and 36.
- You will have about 1 teaspoon of blood drawn to measure your CD4+ and CD8+ T cell counts on weeks 6, 12, 24, and 48.
- You will have about 1.2 tablespoon of blood drawn for PK studies on weeks 1, 2, 4, 6, 7, 8, 10, 12, 16, 20, 24, 28, 36, and 48.
- During your week 6 study visit, some of your labs drawn at your week 4 visit will be checked to see whether it is ok for you to receive the second dose of study drug at week 6.
- If you are a woman and able to get pregnant, some of your blood or urine will be tested for pregnancy at week 6 before you receive the second dose of study drug.
- At the week 6 visit, you will receive cemiplimab or placebo once through a small plastic flexible tube placed into a vein in your arm (intravenous [IV] infusion). This IV infusion will take about 30 minutes; in some cases, the IV infusion may be slowed to help stop any side effects that you may have. Blood will be drawn to determine cemiplimab amounts in your body. These blood draws will happen right before and after the infusion.
- On weeks 1, 6, 7, 12, 16, 20, 24, 28, 36, and 48, you will be asked questions about how well you take your HIV medications.
- You will provide a urine sample for a urinalysis on weeks 6, 12, 24, and 48.
- You will be given the results of some of the study tests as soon as they are available, including all standard viral loads, CD4+ counts, and safety blood tests.
- If you are a man, you will have about one teaspoon of blood drawn to look at the amount of testosterone in your blood on weeks 4, 12, and 48.
- If it has been decided that you will not receive the second dose at week 6, you will still have all week 6 evaluations done. See information above under “Study Medication.”
- After you receive the second dose of cemiplimab or placebo at week 6, you will be contacted by telephone 2 to 3 days. Someone from the site will call you to see how you are doing and to ask you about any signs and/or symptoms you may have.
- If you are a woman and able to get pregnant, some of your blood or urine will be tested for pregnancy at weeks 12, 24, and 48 (in addition to week 6), or at weeks 1, 2, 4, 7, 8, 10, 16, 20, 28, or 36 if you might be pregnant.
- The total amount of blood that may be drawn at a single visit is up to 8.6 tablespoon (127.5 mL).

<u>Confirmation of Virologic Failure</u>

If at any time during the study the result of your viral load test shows measurable virus above the limit of detection of the test, you will be asked to return to the clinic. At this visit:

- You will have about 1.2 tablespoon of blood drawn to measure the amount of HIV in your blood, for an HIV resistance test (resistance means that the drugs are not likely to fight the HIV in your body), and PK studies (to look at the amount of study drug in your body).
- If you are a woman and you think you might be pregnant, some of your blood or urine will be tested for pregnancy.
- You will be asked questions about how well you take your HIV medications.
- You will be asked to stay on the study and complete all of the study visits.

<u>If You Stop Taking Your HIV Drugs during the Study</u>

- You will be asked to stay on the study and complete the study visits so that you can be monitored for safety. You will have all of the regularly scheduled evaluations listed above, except blood for some of the immunologic and virologic studies will not need to be taken.
- If HIV drugs are stopped for more than 7 days before the first infusion of cemiplimab or placebo, the infusion will not be administered.
- If HIV drugs are stopped after the first infusion for more than 7 days, but before the second infusion, the second infusion will not be administered.
- You will be given the results of some of the study tests as soon as they are available, including all standard viral loads, CD4+ counts, and safety blood tests.

<u>If You Have to Stop the Infusion of Cemiplimab Early</u>

If the infusion of cemiplimab or placebo is stopped early for any reason and cannot be completed:

- You will be asked to stay on the study and complete the study visits so that you can be monitored for safety. You will have all of the regularly scheduled evaluations listed above, except you may not have the blood draws to determine the levels of cemiplimab in your body.
- If you are unable to complete the first infusion, the second infusion will not be administered.
- The study team will decide whether blood for the immunologic and virologic studies will need to be taken.

<u>If You Have to Stop the Study Early</u>

If you have to stop the study early, you will be asked to come to the clinic for an additional study visit. At this visit:

- You will have a brief exam physical including vital signs.
- You will have about ½ cup of blood drawn for routine lab tests for safety; for virologic, immunologic, metabolic, PK, and autoimmune studies; to measure the amount of HIV in your blood; and to measure your CD4+ and CD8+ cell counts. Some of the blood you provide will be stored for future protocol-required testing, including gene expression assays.
- You will provide a urine sample for a urinalysis.
- If you are a man, some of your blood will be tested to look at the amount of testosterone in your blood.

- If you are a woman and able to get pregnant, some of your blood or urine will be tested for pregnancy.

If You Do Not Enroll into the Study
If you decide not to take part in this study or if you do not meet the eligibility requirements, we will still use some of your information. As part of this screening visit, some demographic (age, gender, race), clinical (disease condition, diagnosis), and laboratory (CD4 cell count, viral load) information is being collected from you so that the AIDS Clinical Trials Group (ACTG) researchers may help determine whether there are patterns or common reasons why people do not join a study.

Other
Some of your blood samples will be stored (with usual protectors of identity) and used for testing that is required for this study. Usual protectors of identity are defined as: All laboratory specimens, evaluation forms, reports, and other records that leave the site will be identified only by coded number to maintain participant confidentiality. All records will be kept locked. All computer entry and networking programs will be done with coded numbers only. Clinical information will not be released without your written permission, except as necessary for monitoring by the ACTG, Institutional Review Board (IRB), FDA, National Institute of Allergy and Infectious Diseases (NIAID), Office for Human Research Protections (OHRP), other government agencies as part of their duties, or the industry supporter or designee.

Optional Use of your Stored Samples

While you are in this research study, there will be some remaining blood following the completion of required testing. Researchers will use these unused samples along with your associated health information for future research. This information includes your medical condition(s). It may also include personal facts about you, such as your race, ethnicity, gender identity, and sex at birth. You are free to ask questions at any time. You may discuss it with others.

What samples will researchers collect and store?
Researchers will not collect any extra samples for future research. They will only use already collected unused samples.

Where will researchers store my information and samples?
Researchers will store your information electronically in computer databases. This information will include your associated health information and any new information learned from research done with your samples. To maximize research opportunities, researchers may store your samples in other storage facilities or “bio-banks.” There is a possibility that researchers may send your samples to other researchers in your country or outside of your country.

How will researchers use my information and samples?
Researchers may use your information and samples in different types of future research to fight HIV and other related diseases. Some of these research studies may include genetic testing.

What other research could researchers do with my information?
Researchers may produce a lot of new information or "data" through the research done with your samples. This new information may be placed in large databases for other researchers to use. These databases may be only for genetic information, while others may store non-genetic information or both. All these databases store the information electronically without your personal identifiers, such as your name. No one will know just from looking at the information in any of these databases that the information belongs to you.

How long will researchers store my samples for future research?
Researchers will store your samples indefinitely. However, you can change your mind and withdraw your permission at any time.

What are the risks of storing my samples and information for future research?
There is a small risk that someone may use your stored samples or information incorrectly. For example, someone could find out which test results are yours and use this information against you. This incorrect use of information may cause discrimination, distress or other problems to you. For this incorrect use to happen, the person would have to get into a database that links results with your name. To reduce this risk, researchers have security measures in place such as limiting access to databases, not linking names to results, and not placing results in medical records.

What are the benefits of storing my samples and information for future research?
There will be no direct benefit to you from future research using your stored samples and information. However, the information learned may help others. It may take the researchers many years to have any results. In most cases, you will not receive future research results from the researchers.

What other choices do I have?
It is your choice whether or not to give permission for the storage and use of unused samples, as described in this document. If you choose not to give permission, researchers will not store any of your unused samples.

Can I change my mind about the storage and use of my samples and information?
Yes, you can decide to withdraw your permission for the storage and use of your samples and information for future research, whenever you want. If you decide to withdraw your permission, contact the research staff. There are two ways to withdraw your permission. You could allow researchers to remove all your personal identifiers from your samples, so that they are not linked to you anymore. These samples will then become anonymous. You could also ask researchers to destroy your samples, so that

they cannot be used for future research. Researchers will make reasonable efforts to obtain and destroy information and/or samples if consent is withdrawn. However, in either case, researchers will not be able to destroy samples or information from research that is already underway. If you withdraw your permission, there will be no negative consequences for you.

Initial below to confirm your voluntary decision to give permission for the collection, storage, and use of your blood samples and information in future research.
You do not have to give permission for storage of these samples. This will not affect your participation in the study and you may withdraw your permission at any time.

_____ (initials) YES, I agree

_____ (initials) NO, I do not agree

What are the possible discomforts or risks?

The drug used in this study may have side effects, some of which are listed below. There are serious risks associated with this medication. The study team has tried to minimize the risks to you as much as possible. However, life-altering or life-threatening risks are still possible. The study team will carefully monitor you and act quickly to avoid more danger to you if these risks occur. However, some of these serious risks may not be reversed.

The lists below include only the more serious or common side effects with a known or possible relationship to the study drug.

There is a risk of serious and/or life-threatening side effects when non-study medications are taken with the study drug. For your safety, you must tell the study doctor or nurse about all medications you are taking before you start the study and also before starting any new medications while on the study. Also, you must tell the study doctor or nurse before enrolling in any other clinical trials while on this study.

<u>Risks of Cemiplimab</u>
As of March 2018, 757 patients with cancer have received at least one dose of cemiplimab (1 mg/kg, 3 mg/kg, 10 mg/kg, or a 200 mg or 350 mg flat dose) alone or in combination with other treatment regimens in cemiplimab studies. Based on experience, the most common side effects related to cemiplimab treatment are as follows:

Common side effects (more than 10% or more of patients):

- fatigue (tiredness)
- nausea
- diarrhea
- constipation
- decreased appetite.

Uncommon (1 to less than 10% of cancer patients):

- vomiting
- dizziness
- weakness
- underactive or overactive thyroid gland
- increased blood test of liver function
- increased blood test of renal function
- anemia
- dry mouth
- flu-like illness
- swelling or pain of an arm or leg
- trouble sleeping
- shortness of breath
- itching
- cough
- joint pain
- muscle pain
- fever
- headache
- pneumonia (infection in the lungs)
- pneumonitis (inflammation of the lung)
- pulmonary embolism (blood clot in the lungs)
- abdominal pain
- low white blood counts
- chills
- rash
- dry skin
- stomatitis (inflammation of mouth and lips)
- decreased weight, dehydration
- infusion reactions
- muscle spasms
- back pain
- low phosphate, potassium, or calcium in the blood
- urinary tract infection
- sepsis (infection in your bloodstream)
- blurry vision

Rare (less than 1% of patients) but serious:

- Encephalomyelitis (inflammation of the brain) which may result in severe memory loss and occasionally death
- Myasthenia gravis, a disease that causes muscle weakness
- Colitis, inflammation of the colon
- Bronchospasm, a narrowing of air passages in the lungs causing shortness of breath

- Diabetes and diabetic ketoacidosis, a severe complication of diabetes (high blood sugar) where the body makes too much acid in the blood
- Myocarditis, inflammation of the heart wall

Risk of cemiplimab stimulating the immune system (Undetermined frequency)
Side effects can include symptoms of increased immune response (autoimmune reactions) targeting specific organs. The symptoms of these immune responses may include:

- Inflammation of the intestines (colitis) which usually includes diarrhea
- Skin rashes or hives
- Low or high thyroid levels (hypothyroidism or hyperthyroidism) which may cause fatigue, feeling hot or cold, or decreased or increase energy and may require treatment
- Low output from the adrenal gland which can cause low blood pressure or dizziness and required treatment
- Inflammation of the liver (hepatitis)
- Diabetes (elevated blood glucose levels), which may cause nausea, abdominal pain and require insulin treatment
- Low levels of white blood cells, red blood cells (anemia), or platelets
- Neuropathy (tingling or numbness in the feet or hands)
- Severe pneumonitis (inflammation of the lungs), which may cause cough and shortness of breath
- Myocarditis (inflammation of the heart wall)
- Myasthenia gravis (muscle weakness and fatigue)
- Uveitis (inflammation of the eye), which can cause eye pain, redness, irritation, and changes in vision
- Encephalitis (inflammation in the brain), causing headache and confusion

In cancer patients, most of these symptoms and syndromes related to immune responses have been reversible, but may require treatment with steroids to suppress the immune system for several weeks. It is important that these syndromes are managed early to avoid severe symptoms which can be life-threatening.

Some of the immune responses (how your body responds to something by making hormones [chemical messengers in your body]) seen in cancer patients may be irreversible (permanent) and require ongoing and possibly lifelong treatment. The different parts of the body that could be involved are the thyroid (makes hormones that are in charge of digestion), adrenal glands (makes many different hormones in your body), and the pituitary (controls the release of all hormones in your body). The risk for irreversible conditions which would require daily, lifelong treatment appears to be highest for hypothyroidism (your thyroid is not as active as it should be; seen in 5-9% of cancer patients, hyperthyroidism (your thyroid is too active; 1-5% patients), and diabetes (<1% patients). It is important that you understand this is a potential risk in being a participant in this study. In a study of a similar anti-PD-L1 antibody given to participants with HIV, there was one potential treatment-related toxicity of inflammation

of the pituitary gland following one dose that could have been related to study treatment.

To minimize the possibility of these side effects, participants with diabetes, thyroid problems, abnormal cortisol levels (a hormone released in response to stress), or other known problems with their immune system other than HIV or abnormal results on screening for these disorders are excluded from participating in this study. During this study, you will undergo repeated testing for thyroid problems, diabetes, cortisol levels, and liver problems to detect them early if they occur and allow early treatment. Early treatment for these conditions has been shown to be important in decreasing the severity of symptoms. As such, you should let the study team know if you develop any symptoms while on study, so we can determine if they are possibly related to the study treatment.

Risks of Drawing Blood or IV Placement
Having blood drawn may cause some discomfort, lightheadedness, bleeding, swelling, or bruising where the needle enters the body, and in rare cases fainting or infection. Placement of an IV catheter can cause bleeding, swelling, or bruising where the needle enters the body.

Risk to immune system
Other side effects that are not known at this time could happen during the study. There is a risk that waking up immune cells may cause immune problems (your immune cells may cause problems with the normal function of your body). We will monitor you carefully for this. There is the potential for a life-threatening risk including death due to an autoimmune or infusion reaction as described above, or an unknown side effect.

Risk of allergic reaction
All drugs have a possible risk of an allergic reaction, which if not treated right away, could become life-threatening. During the study, you will be told about any new information that may affect your decision to stay in the study. If you decide to stay in the study, you will be asked to sign an updated consent form. If you decide to leave the study early, the study staff will talk with you about your treatment options.

What if I test positive for Hepatitis or Tuberculosis?
If you test positive for hepatitis or tuberculosis in this study, we must report your name to the Colorado Department of Public Health and Environment. Finding out that you have hepatitis or tuberculosis may make it hard for you to get insurance.

Risks of Social Harm
Although the study site will make every effort to protect your privacy and confidentiality, it is possible that your involvement in the study as a participant could become known to others if it is not already and that social harms may result (because you could become

labeled as living with HIV). For example, you could be treated unfairly or discriminated against by family members, friends, and/or the community.

Risk of loss of Confidentiality

There is a risk that people outside of the research team will see your research information. We will do all that we can to protect your information, but it cannot be guaranteed.

Certificate of Confidentiality

This study has been issued a Certificate of Confidentiality from the federal government to help protect your privacy. The Certificate prohibits the researchers from disclosing your name, or any identifiable information, document or biospecimen from the research, with the exceptions listed below. A certificate provides protections against disclosing research information in federal, state, or local civil, criminal, administrative, legislative or other proceedings.

These protections apply only to your research records. The protections do not apply to your medical records.

The researchers may disclose your name or identifiable information, document or biospecimen, under the following circumstances:

- To those connected with the research,
- If required by Federal, State or local laws,
- If necessary for your medical treatment, with your consent,
- For other scientific research conducted in compliance with Federal regulations,
- To comply with mandated reporting, such as a possible threat to harm yourself or others, reports of child abuse, and required communicable disease reporting, or
- Under other circumstances with your consent.

A Certificate of Confidentiality does not protect information you or a member of your family voluntarily release.

Genetic Information Nondiscrimination Act (GINA)

A Federal law, called the Genetic Information Nondiscrimination Act (GINA), generally makes it illegal for health insurance companies, group health plans, and most employers to discriminate against you based on your genetic information. This law generally will protect you in the following ways:

- Health insurance companies and group health plans may not request your genetic information that we get from this research.
- Health insurance companies and group health plans may not use your genetic information when making decisions regarding your eligibility or premiums.

- Employers with 15 or more employees may not use your genetic information that we get from this research when making a decision to hire, promote, or fire you or when setting the terms of your employment.

All health insurance companies and group health plans must follow this law by May 21, 2010. All employers with 15 or more employees must follow this law as of November 21, 2009.

Be aware that this new Federal law does not protect you against genetic discrimination by companies that sell life insurance, disability insurance, or long-term care insurance.

Risks Related to Pregnancy

Treatment in animals with drugs similar to cemiplimab has shown an increased frequency of miscarriage. Given this potential risk to unborn babies, all volunteers participating in sexual acts that could lead to pregnancy for themselves or their partners must agree to use two effective forms of birth control for the duration of the study.

You should not participate in this study if you plan to become pregnant or cannot commit to consistent use of effective birth control for the duration of the study. It is not known if the drug in this study will harm unborn babies. Tests in pregnant animals do show risk and harm to unborn babies. In addition, potential symptoms related to immune responses discussed above could be harmful to unborn babies. If you are having sex that could lead to pregnancy, you must agree not to become pregnant or make a woman pregnant.

Because of the risk involved, you and your partner must use two methods of effective birth control that you discuss with the study staff. You must continue to use both methods for the duration of the study. You may choose two of the birth control methods listed below:

- Consistent use of birth control drugs that prevent pregnancy given by pills, shots, or placed under the skin.
- Consistent use of male or female condoms with or without a cream or gel that kills sperm.
- Consistent use of diaphragm or cervical cap with a cream or gel that kills sperm.
- Intrauterine device (IUD).
- Tubal ligation.

If you can become pregnant, you must have a pregnancy test before you enter this study. The test must show that you are not pregnant. If you think you may be pregnant at any time during the study, tell your study staff right away and you will be given a pregnancy test, as needed. If you become pregnant while in the study, you may choose to stay in the study but you will not receive study drug. Blood tests will be limited to safety blood tests and blood tests that measure the levels of cemiplimab/placebo in your body. You will be asked to have an extra visit 6 months after the end of your pregnancy

in order for the research team to get information on the outcome of the pregnancy (even if it is after your participation in the study ends). If you are taking anti-HIV drugs when you become pregnant, your pregnancy will be reported to an international database that collects information about pregnancies in women taking anti-HIV drugs. This report will not use your name or other information that could be used to identify you.

What are the possible benefits of the study?

This study is designed for the researcher to learn more about the safety of cemiplimab in participants living with HIV. There is no expected direct benefit to you for your participation in this study. Also, there may be risks, as discussed in the section describing the discomforts or risks. Information learned from this study may help others who have HIV.

Are there alternative treatments?

There may be other ways of treating your HIV. These other ways include:

- Treatment with prescription drugs available to you
- Treatment with experimental drugs, if you qualify
- No treatment

You should talk to your doctor about your choices. Make sure you understand all of your choices before you decide to take part in this study. You may leave this study and still have these other choices available to you.

Who is paying for this study?

This research is being sponsored by the National Institutes of health (NIH) with industry support from Regeneron Pharmaceuticals, Inc.

Will I be paid for being in the study?

You will be paid $50.00 for each visit in this study. This will add up to a total of $850.00 if you complete all of the visits. If you leave the study early, or if we have to take you out of the study, you will be paid only for the visits you have completed.

It is important to know that payments for participation in a study is taxable income.

Will I have to pay for anything?

It will not cost you anything to be in the study. There will be no cost to you for the study drug, cemiplimab, or placebo, study-related visits, physical examinations, required

laboratory tests, or other procedures. This study will not provide you with antiretroviral drugs. You, your insurance company, or your health care system may need to assume the cost of drugs not provided by the study. In some cases, it is possible that your insurance company or health care system will not pay for these costs because you are taking part in a research study. Please check with your insurance provider for coverage.

Is my participation voluntary?

Taking part in this study is voluntary. You have the right to choose not to take part in this study. If you choose to take part, you have the right to stop at any time. If you refuse or decide to withdraw later, you will not lose any benefits or rights to which you are entitled.

If there are any new findings during the study that may affect whether you want to continue to take part, you will be told about them.

Can I be removed from this study?

The study doctor may decide to stop your participation without your permission if the study doctor thinks that being in the study may cause you harm, or for any other reason. For example the study doctor may need to take you off study drug without your permission if:

- Continuing the study drug infusion may be harmful to you.
- You are pregnant or breastfeeding.
- You stop taking your HIV medications.
- You need a treatment that you may not take while on the study.
- You are not able to receive the study drug infusion as required by the study.
- You have positive results for antibodies to TPO, GAD65/GAD, or islet cell antigen (from testing done at week 4 prior to week 6 infusion).

The study doctor may need to take you off the study early without your permission if:

- The study is stopped or cancelled.
- The IRB, FDA, NIAID, OHRP, or another government agency with the duty to ensure that research participants are protected, or the industry supporters, recommends that the study be stopped early. An SMC is an outside group of experts who monitor the study. An IRB is a committee that watches over the safety and rights of research participants.

If you must stop participating in this study before completing the study drug infusion or after receiving the study drug before the study is over, the study doctor may ask you to return for one or more study visits.

What happens if I am injured or hurt during the study?

If you have an injury while you are in this study, you should call Dr. Thomas Campbell immediately. [redacted]

We will arrange to get you medical care if you have an injury that is caused by this research. However, you or your insurance company will have to pay for that care. There is no program for compensation either through this institution or the National Institutes of Health. You will not be giving up any of your legal rights by signing this consent form.

Who do I call if I have questions?

The researcher carrying out this study is Dr. Thomas Campbell. You may ask any questions you have now. If you have questions, concerns, or complaints later, you may call Dr. Thomas Campbell at [redacted]. You will be given a copy of this form to keep.

You may have questions about your rights as someone in this study. You can call Dr. Thomas Campbell with questions. You can also call the responsible Institutional Review Board (COMIRB). You can call them at [redacted].

A description of this clinical trial will be available on http://www.Clinical Trials.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.

Who will see my research information?

The University of Colorado Denver (UCD) and its affiliated hospital(s) have rules to protect information about you. Federal and state laws including the Health Insurance Portability and Accountability Act (HIPAA) also protect your privacy. This part of the consent form tells you what information about you may be collected in this study and who might see or use it.

The institutions involved in this study include:

- University of Colorado Denver
- University of Colorado Hospital

We cannot do this study without your permission to see, use and give out your information. You do not have to give us this permission. If you do not, then you may not join this study.

We will see, use and disclose your information only as described in this form and in our Notice of Privacy Practices; however, people outside the UCD and its affiliate hospitals may not be covered by this obligation.

We will do everything we can to maintain the confidentiality of your personal information but confidentiality cannot be guaranteed.

The use and disclosure of your information has no time limit. You can cancel your permission to use and disclose your information at any time by writing to the study's Principal Investigator (PI), at the name and address listed below. If you do cancel your permission to use and disclose your information, your part in this study will end and no further information about you will be collected. Your cancellation would not affect information already collected in this study.

Thomas Campbell, MD
[redacted]

Both the research records that identify you and the consent form signed by you may be looked at by others who have a legal right to see that information, such as:

- Federal offices such as the Food and Drug Administration (FDA) and the Office of Human Research Protections (OHRP) and other local, US, or international regulatory agencies that protect research subjects like you.
- People at the Colorado Multiple Institutional Review Board (COMIRB)
- The study doctor and the rest of the study team.
- The National Institute of Health (NIH), who is paying for this research study.
- Officials at the institution where the research is conducted and officials at other institutions involved in this study who are in charge of making sure that we follow all of the rules for research
- The AIDS Clinical Trials Group (ACTG)
- Drug companies supporting this study, and their designees

We might talk about this research study at meetings. We might also print the results of this research study in relevant journals. But we will always keep the names of the research subjects, like you, private.

You have the right to request access to your personal health information from the Investigator.

The investigator (or staff acting on behalf of the investigator) will use your information for the research outlined in this consent form. They will also make *all or some* **of the following health information about you collected in this study available to the NIH.**

Some of the research procedures involve genetic testing or the use of your genetic information. Your genetic information will not be released to others.

Information about you that will be seen, collected, used and disclosed in this study:

- Name and Demographic Information (age, sex, ethnicity, address, phone number, etc.
- Your social security number
- Portions of your previous and current Medical Records that are relevant to this study, including but not limited to Diagnosis(es), History and Physical, laboratory or tissue studies, radiology studies, procedure results
- Research Visit and Research Test records
- Testing for or infection with diseases reportable to the Public Health department, including but not limited to: Human Immunodeficiency Virus (HIV), hepatitis (all forms) tuberculosis, or other sexually transmitted diseases.

What happens to Data, Tissue, Blood and Specimens that are collected in this study?

Scientists at the University of Colorado Denver and the hospitals involved in this study work to find the causes and cures of disease. The data, blood and specimens collected from you during this study are important to this study and to future research. If you join this study:

- The data, blood, or other specimens given by you to the investigators for this research no longer belong to you.
- Both the investigators and any sponsor of this research may study your data, blood, or other specimens collected from you.
- If data, blood, or other specimens are in a form that identifies you, UCD or the hospitals involved in this study may use them for future research only with your consent or Institutional Review Board (IRB) approval.
- Any product or idea created by the researchers working on this study will not belong to you.
- There is no plan for you to receive any financial benefit from the creation, use or sale of such a product or idea.

If, at some time, you wish to have your samples withdrawn from storage you must submit a written request to Dr. Thomas Campbell and the research team will contact the Biorespository on your behalf.

HIPAA Authorization for Optional Additional Study Procedures –

In this form, you were given the option to agree to additional, optional research procedures. You must also give us your permission, under HIPAA rules, to use and disclose the information collected from these optional procedures, as described above.

Some of these optional procedures may involve genetic testing or the use of your genetic information. Your genetic information will not be released to others.

If you decline to give us permission to use and disclose your information, you cannot take part in these optional procedures, but you can still participate in the main study. Please initial next to your choice:

_____ I give permission for my information, from the optional procedures I have agreed to above, to be used and disclosed as described in this section.

_____ I **do not** give permission for my information for any optional procedures to be used and disclosed; I understand that I will not participate in any optional procedures.

Agreement to be in this study and use my data

I have read this paper about the study or it was read to me. I understand the possible risks and benefits of this study. I understand and authorize the access, use and disclosure of my information as stated in this form. I know that being in this study is voluntary. I choose to be in this study: I will get a signed and dated copy of this consent form.

Signature:_____ Date:_____

Print Name:_____

Consent form explained by:_____ Date:_____

Print Name: _____

Witness Signature: _____ Date_____

Print Name: _____

Witness of Signature ☐
Witness of consent process ☐