You Are Being Asked to Be in a Research Study

Concise presentation of key concepts

DMID Protocol Number: 19-0015
Protocol Title: Mucosal immune responses against *Neisseria gonorrhoeae* following meningococcal immunization in healthy young adults

You are being asked to be in a research study. A research study is designed to answer a scientific question. If you agree to be in the study you will be one of approximately 50 people who are being studied, at Emory.

Why is this study being done?

This study is being done to answer the question: what kinds of immune responses against *Neisseria gonorrhoeae* are generated by a meningococcal group B vaccine? You will receive either an FDA-approved meningococcal group B vaccine (Bexsero®) or a placebo (not a vaccine). The Bexsero® vaccine is known to provide protection against one type of bacteria that causes meningitis, *Neisseria meningitidis* group B, and it is now being studied to see if it provides protection against a related bacteria, *Neisseria gonorrhoeae,* which causes gonorrhea. After you receive the vaccine, samples of your blood, and secretions from the throat (saliva), rectum (and vagina if you are a woman) will be collected to check whether the body develops antibodies or other immune responses (which may protect against an illness) against the bacteria that causes gonorrhea.

Do you have to be in the study?

You are being asked to be in this research study because you are in good health and between the ages of 18-49 years old. It is your decision to be part of this research study. You do not have to be in it. Before you make your decision, you should take time to learn about the study.

What do I have to do if I choose to participate in this study?

You will be in the study for about 7 months. You will be assigned by chance to one of 2 study groups by a computer. There is a 4 out of 5 chance that you will be assigned to receive Bexsero®, the meningococcal group B vaccine, and a 1 out of 5 chance that you will be assigned to receive a placebo shot.

You will have up to 13 study visits that include 1-3 screening visits, 2 vaccine visits, 6 follow-up visits, and 2 phone calls to check on you. You will receive 2 shots of either Bexsero® or placebo 4 weeks apart. During the study, you will answer questions and complete questionnaires about your medical history and sexual behaviors, and undergo physical exams, blood draws, and collection of saliva, rectal, and vaginal mucosal secretions. Rectal secretions will be collected via a small plastic tube called an anoscope that will be inserted into your rectum by a trained study staff member. Vaginal secretions will be collected via a speculum.

Some participants will also undergo 2 rectal biopsy procedures via a plastic tube called a rigid sigmoidoscope that will be inserted into the rectum – only subjects who are eligible and agree to this part of the study will undergo mucosal biopsies. Additionally, as instructed, you will complete a daily electronic memory aid (like a diary log) at home to record any side effects you may experience for 7 days after each shot (separate instructions for the memory aid will be provided).

ALL of these procedures will be paid for by the study.

How is this study going to help you?

If you are in the study, you will be helping the researchers answer the study question. You might not benefit from being in this study. If you are assigned by chance to receive Bexsero®, you may develop protection against meningitis disease (caused by the bacteria, *Neisseria meningitis* group B), but neither you nor the researchers conducting the study will know which shot you have received until the study is over for all participants.

What are the risks or discomforts I should know about before making a decision?

All studies have some risks. The possible risks of participating in this study include: The study visits and procedures will take time. Answering questions about your medical history or sexual behaviors may make you feel uncomfortable. The vaccine that is being tested may not work and may even cause harm. Bexsero® is a licensed vaccine, and the most common side effects include pain at the shot site, muscle aches, redness at the shot site, fatigue, headache, tissue swelling at the shot site, nausea, and joint aches. The study procedures, which include blood draws, saliva sampling, and rectal and vaginal mucosal sampling procedures, may cause brief discomfort. Other risks include loss of privacy, and breach of confidentiality. A full list of expected risks, their frequency and severity are detailed in the "What are the possible risks and discomforts?" section of this document.

If you are planning on getting a COVID-19 vaccination during this study please discuss the timing with both your primary care provider and the study team prior to doing so. You should wait at least 14 days after a COVID-19 vaccination before getting either the first or the second dose of Bexsero®. COVID-19 vaccination should take priority over administration of the study vaccine.

Alternatives to Joining This Study

This study is to learn whether a licensed vaccine can prevent gonorrhea infection. There is no licensed vaccine for gonorrhea. The alternative is not to participate.

Costs

You WILL NOT have to pay for any of the study procedures. There is more information in the cost section below.

What Should I Do Next?

Read this form, or have it read to you. Make sure the study doctor or study staff explains the study to you. Ask questions (e.g., about exact time commitment, about unfamiliar words, more details on specific procedures, etc.). Take time to consider this, and talk about it with your family and friends.

Emory University
Consent to be a Research Subject / HIPAA Authorization

Title: DMID 19-0015 Mucosal immune responses against *Neisseria gonorrhoeae* following meningococcal immunization in healthy young adults

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Introduction
You are being asked to be in a medical research study. This form is designed to tell you everything you need to think about before you decide if you want to be a part of the study. **It is entirely your choice. If you decide to take part, you can change your mind later on and withdraw from the research study.** The decision to join or not join the research study will not cause you to lose any medical benefits. If you decide not to take part in this study, your doctor will continue to treat you.

Before making your decision:

- Please carefully read this form or have it read to you
- Please listen to the study doctor or study staff explain the study to you
- Please ask questions about anything that is not clear

You will be given a copy of this consent form. Feel free to take your time thinking about whether you would like to participate. You may wish to discuss your decision with family or friends. Do not sign this consent form unless you have had a chance to ask questions and get answers that make sense to you. By signing this form you will not give up any legal rights.

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

What is the purpose of this study?
Gonorrhea is a sexually transmitted infection caused by a bacteria called *Neisseria gonorrhoeae*. Gonorrhea can cause infections of the surfaces, or mucosa, of the genital tract in sexually active individuals. It can also cause infections at other surfaces depending on the type of sexual contact, such as the throat and rectum. Rarely, it can also cause blood and joint infections. The rates of gonorrhea infections have been increasing for many years.

Some strains of gonorrhea have become resistant to antibiotics. Therefore, a safe and effective vaccine against gonorrhea is needed.

A large study in New Zealand looked at a vaccine that was designed to protect against meningitis caused by a bacteria called *Neisseria meningitidis* serogroup B. This bacteria is closely related to the bacteria that causes gonorrhea. The researchers in that study found that this meningitis vaccine provided partial protection against gonorrhea in individuals who were 15-30 years of age. Although the meningitis vaccine used in the study in New Zealand is no longer available, there is a similar meningitis vaccine called Bexsero®, which is available in the United States and approved by the FDA. The Bexsero® vaccine contains some of the same components that were in the meningitis vaccine used in the study in New Zealand, and so it could also protect against gonorrhea. However, the mechanism by which these vaccines protect against gonorrhea is unknown.

The purpose of this study is to **learn if Bexsero®, the FDA-approved meningococcal group B vaccine, produces an immune response against the bacteria that causes gonorrhea, *Neisseria gonorrhoeae*, at mucosal surfaces and in the blood.**

This study is being conducted at Emory University Hope Clinic. It is a randomized double-blinded placebo-controlled trial. Placebo-controlled means that some participants will receive Bexsero® vaccine and other participants will receive a placebo shot. Randomized means that the assignment of participants to either the Bexsero group or the placebo group will be random (assigned by chance). Double-blinded means that you and the study team members that will be assessing you throughout the study will not know which shot you receive until after the study is over for all participants.

About 50 participants will sign the consent and qualify for the study. We expect we will need about 100 people to sign the consent and screen for the study to find approximately 50, with no more than 60, who qualify.

What will I be asked to do?

To qualify for this study, you must:

- Be 18-49 years old
- Be in good health, including having no past history of a gonorrhea or meningitis infection, no history of chlamydia or syphilis in the past 12 months, and no past history of serogroup B meningococcal vaccination
- Follow the instructions you are given
- Come to the clinic for all study visits
- Tell us about any changes in your health or the way you feel
- Tell us if you want to stop taking part in this study at any time

There will be approximately 50 participants in this study, and approximately 40 will receive Bexsero® and 10 will receive placebo shots. If you are enrolled into the study, you will be randomized (assigned by chance) to one of the two groups. There is about a 4 in 5 chance that you will be in Group A that will only receive Bexsero®. There is about a 1 in 5 chance you will be in Group B that will only receive the placebo shot (saline). Regardless of which group you are assigned to, you will get 2 doses of the same shot (either Bexsero or saline, depending on your group) over a 4 week period. You and the study team will not know which study group you are in. Only the study staff who prepares and gives you the shot will know.

We will collect samples of mucosal secretions and blood from you at specific time points before and after each vaccine or placebo dose. For men, we will collect saliva as well as mucosal secretions from the rectum. For women, we will collect saliva as well as mucosal secretions from the vagina and rectum.

Rectal Biopsy

In addition to the mucosal and blood sampling procedures described above, a subset of approximately 20 participants will also undergo a rectal mucosal biopsy at two time points to study the immune responses in tissue. This subset will include approximately 16 participants from Group A and 4 participants from Group B, approximately equally divided between men and women. If you are eligible to participate in the study, but do not wish to enroll in the rectal biopsy group, you can still enroll in the study.

The overall approximate study group assignments for the study are summarized in the table below.

Study Group	Shot	Participants undergoing a rectal mucosal biopsy (total number = 20)		Participants not undergoing a rectal mucosal biopsy (total number = 30)		Total
		Men	Women	Men	Women	
A	Bexsero®	8	8	12	12	40
B	Placebo	2	2	3	3	10

In general, this study requires the following:

- 1 or more screening visits
- Up to 8 clinic visits over about 7 months
- Review of medical history, medications, and recent sexual history
- Height and weight measurements
- Vital signs measurement, including oral temperature, blood pressure, and heart rate
- Physical exams (pelvic or rectal exams only if indicated based on your symptoms)
- Women able to bear children: urine pregnancy tests
- Blood draws for:
    - Screening Labs: HIV test, rapid plasma reagin (RPR) (an antibody test for syphilis) (only performed at the initial screening visit)
    - Safety Labs (only for participants who will undergo rectal mucosal biopsy): blood counts and tests of blood clotting function
    - Research Tests: gonococcal immune responses to the shot
- Swabs for sexual transmitted infection (STI) testing (gonorrhea and Chlamydia for men and women, Trichomonas for women only), including:
    - Throat and rectal swab for men and women
    - Self-collected vaginal swab for women
- Mucosal secretion sampling for Research Tests, including:
    - Saliva and rectal mucosal sampling for men
    - Saliva, vaginal, and rectal mucosal sampling for women
- Rigid sigmoidoscopy with rectal mucosal biopsy (only for a subset of participants as noted above)
- 2 shots in the upper arm at 2 different visits
- Wait at the clinic for at least 15 minutes after each vaccine or placebo shot
- Document reactions to vaccine or placebo shot on an electronic memory aid, with a ruler and thermometer

Rectal Secretion Samples and Rectal Biopsy:
All rectal sampling procedures will be performed by study staff specifically trained in these procedures. The study staff has performed more than 300 similar procedures for other IRB approved protocols with zero complications (after both rectal secretion sampling and rectal biopsy). The study clinician will insert a small plastic tube called an anoscope, after which cotton swabs will be used to wipe the sides of your anus to collect the rectal secretion samples.

If you are enrolled into the subset who will undergo rectal mucosal biopsy, after the rectal secretion samples are collected, the study clinician will insert a plastic tube called a "rigid sigmoidoscope" into your rectum. Once the scope is inserted, up to 12 biopsies will be collected in which small pieces of your bowel tissue (less than ¼ inches per biopsy) will be removed. It is important that you do not put anything in your rectum or bottom for 48 hours before and 7 days after the procedure because you may be at a higher risk for infection while the rectum is healing. A day or two after your biopsy procedure, one of the study staff will call you to see how you are doing, ask if you have any symptoms. The risk of serious complications after rectal mucosal biopsy is very low (less than 1 in 1000) – some individuals have brief pain or bleeding after the procedure which resolves on its own or with over the counter pain medications, which you will be allowed to take after the procedure.

Oropharyngeal Secretion Samples:
A study staff member will collect samples of your saliva (no swabs) into a collection container. No biopsies will be collected of the throat.

Vaginal Secretion Samples:
All vaginal sampling procedures will be performed by study staff specifically trained in these procedures. A study clinician will place a lubricated speculum into your vagina. We will collect 2-3 swabs or wicks of the area. We will also roll a brush along the walls of your vagina. Finally, we will put some fluid into your vagina and then re-collect it with the same tube. No biopsies will be collected of your vagina.

The specific study activities and when they are performed are described below:

Screening Visits
The first screening visit will take place before any study procedures are performed (between 1 and 56 days before you receive any study shot). A second screening visit may be done if tests done at the first screening visit need to be repeated (between 1 and 7 days before you receive any study shot).

The following procedures will occur at the screening visits:

- You will review and sign the informed consent form, if you choose to sign. If you do not sign, you cannot participate in the study
- We will collect and review your medical history, medications, and recent sexual history
- We will collect your vital signs, including temperature, blood pressure, and heart rate
- We will collect your height and weight
- You will have a physical exam
- We will collect your blood from a vein in your arm (about 1 tablespoon) for labs to screen for medical conditions that may make you ineligible to participate in the study

- We will perform testing for sexually transmitted infections (STI). This will include a throat and rectal swab and urine sample for men, and a throat, rectal, and self-collected vaginal swab for women
- Women able to bear children: you will have a urine pregnancy test

To be in the study all of your labs must come back within normal range and for women able to bear children, your pregnancy test must be negative. If you qualify, you must be available to receive the first study shot within 56 days of this visit.

If you are in the subset of participants that will undergo rectal mucosal biopsies, the first screening visit will occur between 1 and 28 days before your first biopsy procedure. A second screening visit may be done if tests done at the first screening visit need to be repeated (if there was an abnormal result that we believe to be only temporary) (between 1 and 7 days before your first biopsy procedure). Your first vaccine or placebo dose visit will then occur between 14 and 28 days after your biopsy procedure.

A third screening visit (between 28 and 14 days before your first study shot) will take place if you are eligible for and consent to rectal mucosal biopsy procedures. This means you may have up to three screening visits. For you, the following procedures will occur at the first rectal biopsy visit:

- Review labs obtained at the initial screening visit(s)
- Repeat swab collection for STI testing, if indicated based on recent sexual history
- Rigid sigmoidoscopy and rectal mucosal biopsy procedure

All Study Visits (study Days 1, 8, 15, 29, 36, 43, 57, and 181)

You will have the following procedures occur at all study visits:

- Update your medical history and medications, if any changes
- Update your sexual history, if any changes (at Visits 1, 29, 43, 57, and 181 only)
- Assess any side effects that you have had and any new onset medical conditions
- Obtain your vital signs, including your temperature, blood pressure, and heart rate
- You will have a physical exam, based on if you are having any symptoms that need to be assessed
- We will collect your blood from a vein in your arm
    - 9 tablespoons on Day 1
    - 1 tablespoon on Day 8
    - 4 tablespoons on Day 15
    - 7 tablespoons on Day 29
    - 1 tablespoon on Day 36
    - 9 tablespoons on Day 43
    - 5 tablespoons on Day 57
    - 4 tablespoons on Day 181

Visits for Vaccine or Placebo Shots (study Days 1 and 29) or Follow-Up (study Days 8 and 36)

The following additional procedures will occur during Visits for Vaccine or Placebo Shots (Days 1 and 29):

- You will be assigned to a study group (on Day 1 only)
- We will review your COVID-19 vaccine history to ensure you are at least 14 days out from any COVID-19 vaccine before receiving study vaccine.
- We will perform testing for sexually transmitted infections (STI). This will include a throat and rectal swab and urine sample for men, and a throat, rectal, and self-collected vaginal swab for women (on Day 29 only)
- We will assess where you receive the vaccine or placebo prior to the shot in your arm

- You will receive vaccine or placebo into the muscle of your upper arm (on Days 1 and 29)
- You will need to wait for at least 15 minutes at the clinic for us to check for any reaction you may have to the shot
- You will be provided an electronic memory aid, ruler, and thermometer to record reactions to the shot

The following procedures will occur on Follow-Up Visits (Days 8 and 36):

- We will review your memory aid and examine your arm where you received the shot

Mucosal Sampling (study Days 1, 29, 43, and 181)

You will undergo sampling of mucosal secretions on Days 1, 29, 43, 57, and 181. This will include saliva collection and rectal sampling for men, and saliva collection, vaginal, and rectal sampling for women.

If you are in the rectal mucosal biopsy group, you will undergo a second rigid sigmoidoscopy and rectal biopsy procedure on Day 43.

Early Termination & Unscheduled Visits

If you get at least one study vaccine or placebo shot, we will ask you to stay in this study for about 6 months after your last study shot to review your health. If you agree, we will ask you to have blood and mucosal secretion samples taken at the specific time points described above after your last study shot to measure your immune responses.

At the early termination and unscheduled visits, you may have the following happen:

- We will update your medical history and medications, if there have been any changes since the last study visit
- We will update your sexual history, if there have been any changes since the last study visit
- We will obtain vital signs (including your temperature, blood pressure, and heart rate), if you are having any symptoms that need to be assessed
- You will have a physical exam, based on if you are having any symptoms that need to be assessed
- We will review your memory aid and examine your arm where you received the last dose of the study shot (only if the visit occurs ≤7 days after the last shot)
- If you are a woman, you will have a urine pregnancy test, if indicated based on the information you provide us about your health
- We will collect your blood through a vein in your arm (early termination visits only)
- We will collect your mucosal secretions (saliva and rectal sampling for men, and saliva, vaginal, and rectal sampling for women) (early termination visits only)

Testing of Blood, Mucosal, and Tissue Samples

The total amount of blood collected across all study clinic visits is up to approximately 30 tablespoons.

Blood, mucosal, and tissue samples will be labeled only with a study identifier and will not be labeled with your name or initials, or any other information that could readily identify you. Information about your blood and mucosal samples for clinical testing (HIV test, antibody test for syphilis, swabs for gonorrhea, Chlamydia, and Trichomonas, and blood counts and tests of blood clotting function) will be kept confidential to the best of our and the sponsor's ability, and as required by law. Positive test results for HIV, syphilis, gonorrhea, and Chlamydia will be reported to the health department by law.

The research tests will measure immune responses to the Bexsero®/placebo vaccine shot. Giving blood samples for these tests will not benefit you. The results of these tests are useful only for research purposes. Your individual research results will not be available to you or your regular doctor.

All research samples will be labeled only with a barcode and a unique tracking number to help protect your information. All samples for the research tests will stored at the study site. If you give your consent, once the research tests for this study have been completed, any residual samples will be sent to a storage facility. Staff at the study site and storage facility or research testing labs will not know your identity, or even the study identifier you were assigned.

How will my vaccine or placebo shots be provided?

The vaccine or placebo that you will take will be dispensed by the pharmacy and given to you by a study team member. The study team members who will be evaluating your response to the vaccine or placebo will not know which shot you received. If you have questions about the vaccine or placebo, you should ask the principal investigator or study nurse.

Who owns my study information and samples?

If you join this study, you will be donating your samples and study information. You will not receive any compensation if your samples or information are used to make a new product. If you withdraw from the study, data and samples that were already collected may be still be used for this study.

What are the possible risks and discomforts?

All studies have some risks. The potential risks and discomforts of each study procedure is detailed below:

Screening

In this study you will be tested for HIV, syphilis, gonorrhea, and chlamydia infection (women will also be tested for trichomonas infection). An unexpected positive result, or any other concerning health condition brought to your attention during screening, may cause stress and anxiety. The study team will refer you to medical care, as needed. A positive result on any of these tests will exclude you from participation in the study. Positive tests will be reported to the Public Health Department as required by state law.

Bexsero®

Bexsero® was FDA approved in 2005 for use in individuals aged 10 to 25 years. Bexsero® is generally well-tolerated. The most common (frequency ≥10%) side effects that occurred after Bexsero® shot in clinical trials include:

- Pain at the shot site (≥83%)
- Muscle aches (≥48%)
- Redness at the shot site (≥45%)
- Fatigue (≥35%)
- Headache (≥33%)
- Tissue swelling near the shot site (≥28%)
- Nausea (≥18%)
- Joint aches (≥13%).

Enlarged lymph nodes have been reported but because this possible side effect was voluntarily reported after the vaccine became available to the general public, we can't tell how often it occurs or if it is related to the vaccine.

Although Bexsero® is only licensed for individuals aged 10-25 years of age, the Advisory Committee on Immunization Practices (ACIP) has noted that there are no theoretical differences in safety for persons aged >25 years compared with those aged 10–25 years, thus the ACIP supports the routine use of Bexsero® vaccine in persons aged ≥10 years who are at increased risk for serogroup B meningococcal disease.

Allergic reaction

A small number of people (about 1 in 4 million) have immediate and serious allergic reactions to licensed vaccines called anaphylaxis (also known as allergic shock). These reactions can be:

- skin rash (hives)
- swelling around the mouth, throat, and eyes
- difficulty breathing
- a fast heartbeat
- fainting due to decrease in blood pressure

If these reactions happen, emergency medications can be given. These medications can usually stop the reactions. Most people who have anaphylaxis get better completely. People can die, but not very often. We do not expect this to happen in this study. You will stay at the clinic for at least 15 minutes after the vaccine or placebo shot so we can monitor you for any severe reactions.

Blood draw and vaccine or placebo shot

Having blood drawn or getting a shot in your arm can cause

- pain
- bruising
- light headedness and fainting
- rarely, an infection
- very rarely, nerve injury

The study team does their best to reduce these risks by:

- applying pressure to the blood draw site for several minutes
- having you lay down for blood draw
- using sterile techniques

Oropharyngeal (Throat) Secretion Samples:

Saliva sampling may cause transient discomfort. You will be asked to stop some activities before these samples are collected, including oral sex, or use of certain oral or inhaled medications – such as steroids – which may be inconvenient.

Vaginal Secretion Samples:

Vaginal mucosal secretion sampling may cause anxiety, transient discomfort, and embarrassment. You will be asked to stop some activities before these samples are collected, including vaginal sex, or use of anything in or around your vagina – such as tampons, spermicide, lubricants, or medications (e.g., topical yeast treatments) – which may be inconvenient.

Rectal Secretion Samples:

Rectal mucosal secretion sampling may cause anxiety, transient discomfort, and embarrassment. You will be asked to stop some activities before these samples are collected, including receptive anal sex, or insertion of anything into your anus – such as cleaning products, lubricant, enemas, or douches (including water) – which may be inconvenient.

Rigid Sigmoidoscopy and Rectal Biopsy:
Rigid sigmoidoscopy may cause anxiety, embarrassment, abdominal cramping, or fullness. You may experience minor bleeding or abdominal pain after the rectal biopsy procedure that typically resolves on its own. There is theoretical increased risk of acquiring HIV or another infection if you are exposed to one of these infections soon after the rectal biopsy procedure (i.e. while the mucosal surface is damaged). Therefore, you will be counseled not to engage in anal sex for 1 week after the rectal biopsy procedure.

For women
If you are a woman, you cannot take part in this study if you are:

- pregnant
- planning to become pregnant during this study
- nursing a child

If you become pregnant, there may be risks to you, the embryo, the fetus, or the nursing infant after birth. These risks are not yet known. Because of this, you must have a negative urine pregnancy test at screening and before each of your study shots.

If you are able to become pregnant, you must meet one of the conditions below starting 30 days before your 1st study shot through the end of the study:

- abstinence or no sex with a man
- monogamous relationship with a man who had a vasectomy at least 6 months before your 1st study shot
- oral contraceptives ("the pill")
- IUDs
- birth control implants under the skin
- birth control shots
- birth control patch
- vaginal ring
- condoms and diaphragms/cervical cap with spermicide (“double barrier” method)

Some methods of birth control will not work when you are taking certain drugs or medications. Be aware you can still become pregnant even if you use an acceptable birth control method.

If you become pregnant during this study, report this to us immediately. You will not get any more study vaccine or placebo shots. With your permission, we will continue to follow you for safety, however you will no longer undergo any blood or mucosal sampling procedures. We will also ask about your health and the outcome of your pregnancy. This information may be shared with the sponsor and Institutional Review Board (IRB), a group of people who review clinical research studies to protect the rights and welfare of research participants.

New Information
It is possible that the researchers will learn something new during the study about the risks of being in it. If this happens, they will tell you about it. Then you can decide if you want to continue to be in this study or not. You may be asked to sign a new consent form that includes the new information if you decide to stay in the study.

Will I benefit directly from the study?
This study is not designed to benefit you directly. This study is designed to learn more about immune responses against gonorrhea generated by Bexsero®. The study results may be used to help others in the future. There is no guarantee the study shots will be safe or will protect you from gonorrhea.

Will I be compensated for my time and effort?

You will be compensated for each completed study visit, for your time and effort:

- $75 for screening visit(s) (1-2 visits)
- $100 for each shot visit (2 visits)
- $75 for each follow-up visit (5 visits)
- $20 for unscheduled or early termination visits, if needed
- $25 for collection of rectal and vaginal fluids (5 visits)

You will get between $775 - $850 if you complete all study visits.

If you are in the subset of participants that undergoes rectal mucosal biopsies, you will also be compensated for each completed biopsy visit, for your time and effort:

- $125 for each rectal mucosal biopsy visit (1 screening visit and 1 visit on Day 43)

If you are in the subset of participants that undergoes rectal mucosal biopsies, you will get between $975 - $1,050 if you complete all study visits.

If you do not finish the study, we will compensate you for the visits you have completed.

Our preferred method of compensation will be the use of Clincards. All payments are made using a personal payment card. We issue this to you for free. The payment card is a prepaid debit card. It can be used exactly like a MasterCard. We load money onto your card electronically every time you need to be paid. The card scheme is run by Greenphire, an independent company specializing in payments for research studies and clinical trials. To issue your card, we need to give Greenphire some of your personal information such as: name, date of birth, social security number, address, phone number, email, and date of study visits. Banks and other financial institutions can access this information if they need to verify your identity when you use your card.

Emory University is required by law to report any payments we make to the IRS. To do this, Emory University Department of Finance needs to keep your Social Security Number on file. We are asking you to allow us to communicate your name, address, date of birth, research study name and Social Security Number to Greenphire and Emory University Department of Finance. If you want to receive e-mail or text alerts when payments are made to you, we will ask you to provide your e-mail or phone number as well. All of this information will be stored on computers owned by Greenphire. Greenphire will not have access to any other information collected during this study. Full instructions about using your card are included when we issue it. Please ask if you have any questions or concerns about the card scheme.

We would also like the option of compensating you in the form of cash, check or gift card if ClinCard accessibility is not available. You will be asked to fill out a tax form, including your Social Security or Taxpayer Identification Number, in order to be reimbursed, depending on the amount and method of payment. Some payment methods involve mail coming to your house, which may be seen by others in your household. You can decline payment if you are concerned about confidentiality, or you can talk to the study team to see if there are other payment options. You will need to fill out a W-9 form.

How will you protect my private information that you collect in this study?

Whenever possible, a study number, rather than your name, will be used on study records. Your name and other identifying information will not appear when we present or publish the study results.

Certain offices and people other than the researchers may look at study records. Government agencies and Emory employees overseeing proper study conduct may look at your study records. These offices include The Food and Drug Administration, the Office for Human Research Protections, the sponsor (the NIH), the funder (the NIH), the Emory Institutional Review Board, and the Emory Office of Research Compliance. Emory will keep any research records we create private to the extent we are required to do so by law.

Certificate of Confidentiality

There is a Certificate of Confidentiality from the National Institutes of Health for this Study. The Certificate of Confidentiality helps us to keep others from learning that you participated in this study. Emory will rely on the Certificate of Confidentiality to refuse to give out study information that identifies you. For example, if Emory received a subpoena for study records, it would not give out information that identifies you.

The Certificate of Confidentiality does not stop you or someone else, like a member of your family, from giving out information about your participation in this study. For example, if you let your insurance company know that you are in this study, and you agree to give the insurance company research information, then the investigator cannot use the Certificate to withhold this information. This means you and your family also need to protect your own privacy.

The Certificate does not stop Emory from making the following disclosures about you:

- Giving state public health officials information about certain infectious diseases,
- Giving law officials information about abuse of a child, elderly person or disabled person.
- Giving out information to prevent harm to you or others.

Giving the study sponsor or funders information about the study, including information for an audit or evaluation.

Storing and Sharing your Information

De-identified data from this study (data that has been stripped of all information that can identify you) may be placed into public databases where, in addition to having no direct identifiers, researchers will need to sign data use agreements before accessing the data. We will remove or code any personal information that could identify you before your information is shared. This will ensure that, by current scientific standards and known methods, it is extremely unlikely that anyone would be able to identify you from the information we share. Despite these measures, we cannot guarantee anonymity of your personal data.

In general, we will not give you any individual results from the study of the samples you give us. If we find something of urgent medical importance to you, we will inform you, although we expect that this will be a very rare occurrence. Once every research participant has completed their participation in the study and the study data have been finalized, we will inform you whether you received the vaccine or placebo shot for your vaccination records.

Your data and leftover samples from this study may be useful for other research being done by investigators at Emory or elsewhere. If you provide your consent to use these leftover samples, we may provide your deidentified data and/or specimens to other researchers. If we do, we will not include any information that could identify you. If your data or specimens are labeled with your study ID, we will not allow the other investigators to link that ID to your identifiable information.

In Case of Injury

If you get ill or injured from being in the study, Emory will help you to get medical treatment. Neither Emory nor the sponsor will pay for your medical treatment. In general, no long-term medical care or financial compensation for research-related injuries will be provided by the NIH or the Federal Government. Your insurer will be billed for your treatment costs. If you do not have insurance, or if your insurance does not pay, then you will have to pay these costs.

Emory and the sponsor have not, however, set aside any money to pay you if you are injured as a result of being in this study or to pay for this medical treatment. For Emory, the only exception is if it is proven that your injury or illness is directly caused by the negligence of an Emory employee. "Negligence" is the failure to follow a standard duty of care. You do not give up any legal rights you may have by being in this study, including any right to bring a claim for negligence.

Costs

There will be no costs to you for participating in this study, other than basic expenses like transportation. You will not be charged for any of the research activities. If the study procedures result in any medical complications that would not fall under "injury" as discussed above, the cost of treatment for those complications may be charged to you or your insurance.

Withdrawal from the Study

You have the right to leave a study at any time without penalty.

The researchers also have the right to stop your participation in this study without your consent for any reason, especially if they believe it is in your best interest or if you were to object to any future changes that may be made in the study plan.

These are the expected reasons why the researchers may stop your participation:

- Reasons related to you (for example, if you move to another city or do not agree to get your study shots)
- Reasons related to your health (for example, if you have a serious reaction to your study shots)
- Because this entire study is stopped (the sponsor may stop this study at any time)
- If you do not later consent to any future changes that may be made to how this study is done
- If you become pregnant

Authorization to Use and Disclose Protected Health Information

The privacy of your health information is important to us. As part of this study, we will be requesting health care entities who are covered by the Health Insurance Portability and Accountability Act and regulations (HIPAA) to provide us with health information that identifies you ("individually identifiable health information" or "IIHI"). Because the health care entities are covered by HIPAA, we must have your authorization to obtain your IIHI from them. However, the researchers who get your IIHI from the health care entities are not covered by HIPAA. Once they receive your IIHI from the health care entities, they will put it in a separate research record that is not a part of your medical record. IIHI placed in the separate research record is not be covered by HIPAA.

Purpose of this Authorization:

By signing this form, you give us permission to get your IIHI from health care entities and to use and share your IIHI as described in this document. You do not have to sign this form. If you do not sign this form, then you may not participate in the research study.

IIHI that Will be Used/Disclosed:
The IIHI that we will use or share for the research study includes:

- Medical information about you including your medical history and present/past medications.
- Results of exams, procedures and tests you have before and during the study.
- Laboratory test results.

Purposes for Which Your IIHI Will be Used/Disclosed:
We will use and share your IIHI for the conduct and oversight of the research study. Once we have your IIHI we will keep it in a separate research record that will be used for the conduct of the study. If you leave the study, we may use your IIHI to determine your vital status or contact information.

Use and Disclosure of Your IIHI That is Required by Law:
We will use and disclose your IIHI when we are required to do so by law. This includes laws that require us to report child abuse or abuse of elderly or disabled adults.

People Who will Use/Disclose Your IIHI:
The following people and groups will use and disclose your IIHI in connection with the research study:

- The Principal Investigator and the research staff will use and disclose your IIHI to conduct the study.
- The Principal Investigator and research staff will share your IIHI with other people and groups to help conduct the study or to provide oversight for the study.
- The National Institute of Allergy and Infectious Disease is the Sponsor of the study. The Sponsor may use and disclose your IIHI to make sure the research is done correctly and to collect and analyze the results of the research. The Sponsor may disclose your IIHI to other people and groups like study monitors to help conduct the study or to provide oversight for the study.
- The following people and groups will use your IIHI to make sure the research is done correctly and safely:
    - Emory offices that are part of the Human Research Participant Protection Program and those that are involved in study administration. These include the Emory IRB, the Emory University and Healthcare Compliance Offices, and the Emory Office for Clinical Research.
    - Government agencies that regulate the research including: Office for Human Research Protections; Food and Drug Administration.
    - Public health agencies.
    - Research monitors and reviewer.
    - Accreditation agencies.
- Sometimes a Principal Investigator or other researcher moves to a different institution. If this happens, your IIHI may be shared with that new institution and their oversight offices.

Expiration of Your Authorization
Your IIHI will be used until this research study ends.

Revoking Your Authorization
If you sign this form, at any time later you may revoke (take back) your permission to use your IIHI. If you want to do this, you must contact the study team at:
Varun K. Phadke, MD
Emory University School of Medicine,
The Hope Clinic, 500 Irvin Court, Suite 200
Decatur, GA 30030
Phone: XXX-XXX-XXXX during business hours. For evening/weekend hours call: XXX-XXX-XXXX (Emory Hospital Paging Service, ask for the physician on call for the Hope Clinic, pager number XXXXX):

At the moment you choose to take back your permission to use your IIHI, we would not collect any more of your IIHI. However, we may use or disclose the information you already gave us as described in this Authorization. If you revoke your authorization you will not be able to stay in the study.

Other Items You Should Know about Your Privacy
Not all people and entities are covered by the Privacy Rules. HIPAA only applies to health care providers, health care payers, and health care clearinghouses. HIPAA does not apply to research that does not include treatment that is billed to insurers or government benefit programs. If we disclose your information to people who are not covered by the Privacy Rules, including HIPAA, then your information won't be protected by the Privacy Rules. People who do not have to follow the Privacy rules can use or disclose your information with others without your permission if they are allowed to do so by the laws that cover them. The researchers, and people and companies working with them are not covered by the Privacy Rules. They will only use and disclose your information as described in this Consent and Authorization.

To maintain the integrity of this research study, you generally will not have access to your IIHI related to this research until the study is complete. When the study ends, and at your request, you generally will only have access to your IIHI that we maintain in a designated record set. A designated record set is data that includes medical information or billing records that your health care providers use to make decisions about you. You will not have a right of access to IIHI kept in a separate research record used only for research purposed. If it is necessary for your health care, your health information will be provided to your doctor.

We may remove identifying information from your IIHI. Information without identifiers is not subject to HIPAA and may be used or disclosed with other people or organizations for purposes besides this study.

Contact Information
Contact Dr. Varun Phadke at XXX-XXX-XXXX during business hours. For evening/weekend hours call: XXX-XXX-XXX (Emory Hospital Paging Service, ask for the physician on call for the Hope Clinic, pager number XXXXX):

- if you have any questions about this study or your part in it,
- if you feel you have had a research-related injury or a bad reaction to the study drug, or
- if you have questions, concerns or complaints about the research

Contact the Emory Institutional Review Board at 404-712-XXXX or 877-503-XXXX or irb@emory.edu:

- if you have questions about your rights as a research participant.
- if you have questions, concerns or complaints about the research.
- You may also let the IRB know about your experience as a research participant through our Research Participant Survey at http://www.surveymonkey.com/s/XXXXXX.

OPTIONAL: Future Research

As part of this study, we are obtaining samples and information from you. We would like to use your leftover samples (including blood, mucosal secretion, and rectal biopsy samples) and your information (with ID codes) for secondary research. Secondary research is research that is not part of this study but will be performed in the future.

Secondary research may help us understand infections, diseases, and/or treatments. The types of research may include new or different immune-based laboratory tests to provide information for the making of new vaccines, or for the study of gonorrhea or other infections.

If you give consent below, your samples will be stored indefinitely at a site determined by the study sponsor, National Institutes of Health (NIH). Each sample will be labeled with a barcode and a unique tracking number (ID codes). Personnel at the storage facility and testing lab will not know your identity. However, the researchers who enrolled you will keep in a secure area a code key that could connect ID codes to identify you, if needed.

Stored samples and information will be used only for research purposes. After this study is over, stored samples and information may be shared with other investigators, institutions or drug companies. The samples will not be sold or used directly for production of any commercial product. There are no benefits to you in the storage and use of your samples or information. The results of any secondary research will not be returned to you. The results will be kept confidential in the same way as the results of other testing done for this study.

You may choose not to consent for secondary use and still be in the vaccine study. You may change your mind and withdraw consent for the storage and use of your coded samples or information at any time. You will need to contact Dr. Varun Phadke at the Hope Clinic.

Only stored samples with an ID code and not used in this research can be removed or destroyed. Research that has already begun using your specimens cannot be withdrawn. For example, if some research with your specimens and data has already been completed, the information from that research may still be used. Also, for example, if the specimens and data have been shared already with other researchers, it might not be possible to withdraw the specimens and data.

Please feel free to ask the study staff any questions you may have about how your samples and information may be used.

OPTIONAL: Contact for Future Studies

We may want to contact you in the future to see if you are interested in participating in other studies. If and when you are contacted, you can decide then if you want to participate or not in new studies. In order to be able to contact you in the future, we will need to store your information in a secure password protected data base. We may contact you about future studies by telephone, e-mail, text, or mail. Please note that these methods of communication may not be secure.

The risk to you is a potential loss of privacy; however, your privacy is very important to us and we have safeguards in place to protect your information.

We plan to store in the database selected information including but not limited to the following: your name, gender, date of birth, address, telephone number, e-mail, studies that you either screened for or enrolled in, and

health information and sexual orientation so that we can match you with a study that best fits you and contact you in the future. This information will not be used in research without your specific consent. Your decision regarding future contact will not affect your participation in this study.

Consent and Authorization

Please **initial** your decision about each of the optional study parts detailed above. Indicate only ONE option for each part.

OPTIONAL: Future Research

_____YES, you may store my unused coded (identified as described above) samples for an indefinite period of time for future research as described above.

_____YES, you may store my unused samples for an indefinite period of time for future research as described above, but you must remove any information that could identify it as mine (labeling it only by study and dose group).

_____NO, you may not use my samples for other future research. Destroy my unused samples at the end of this study.

OPTIONAL: Contact for Future Studies

_____YES, you may contact me about future studies

_____ NO, you may not contact me about future studies.

For individuals consenting to be in the research study <u>AND undergo rectal mucosal biopsy</u>

TO BE FILLED OUT BY SUBJECT ONLY

Please **print** your name, **sign**, and **date** below if you agree to be in this research study. By signing this consent and authorization form, you will not give up any of your legal rights. We will give you a copy of the signed form to keep.

_____

Name of Subject

_____ _____

Signature of Subject (18 or older and able to consent) **Date** **Time**

For individuals consenting to be in the research study <u>BUT NO rectal mucosal biopsy</u>

TO BE FILLED OUT BY SUBJECT ONLY

Please **print** your name, **sign**, and **date** below if you agree to be in this research study. By signing this consent and authorization form, you will not give up any of your legal rights. We will give you a copy of the signed form to keep.

_____

Name of Subject

_____ _____

Signature of Subject (18 or older and able to consent) **Date** **Time**

TO BE FILLED OUT BY STUDY TEAM ONLY

_____

Name of Person Conducting Informed Consent Discussion

_____ _____

Signature of Person Conducting Informed Consent Discussion **Date** **Time**