RESEARCH CONSENT FORM

HIV Positive Non-Smokers (Bronchoscopy with Local Analgesia and possible Conscious Sedation)

Basic Information

Title of Project:	Impact of Smoking and its Cessation on Systemic and Airway Immune Activation
IRB Number:	H-35295
Sponsor:	National Institute on Drug Abuse (NIDA)
Principal Investigator:	Archana Asundi, MD archana.asundi@bmc.org 650 Albany Street, Boston, MA 02118
Phone Numbers:	Dr. Archana Asundi (24 hours): 857-313-9870, pager 5034 Research Team (business hours): 617-414-3514

NCT02836067

Overview

We are asking you to be in a research study. A research study is an organized way of collecting information about scientific questions. This form will tell you what you should expect if you agree to be in the study. There are programs in place to make sure that investigators fulfill their obligations listed in this form.

It is your decision whether or not to join the study. We are asking if you will participate in this research study because you have HIV infection and do **not** smoke cigarettes. You will not be allowed to participate if you smoke marijuana, crack, fentanyl, heroin, hookah, e-cigarettes, or chew tobacco, before or during this study. If you agree, your participation in this study will involve 2 separate visits with the researchers. You will find more information about what will happen in this study later in this form.

The main risks of being in the study are related to the bronchoscopy. There is a chance you may experience discomfort in the nose and throat, cough, or a hoarse voice, all which are likely to last only a short time. You will find more information about risks later in this form.

Your doctor may also be an investigator in this research study. Being an investigator means your doctor is interested in both you and the study. You may want to get a second opinion about being in the study. You can do so now or at any time during the study. Another doctor who is not an investigator can give you a second opinion about being in the study. You do not have to agree to be in this study even though it is offered by your doctor.

Purpose

The purpose of this study is to learn how smoking affects the immune systems in people with HIV infection. We would like to know if HIV infected smokers who quit smoking have different responses in the lung and immune system from people who keep smoking. The information we learn may help clinicians make better decisions on how to treat HIV infected patients who smoke.

What Will Happen in This Research Study

You will be one of approximately 30 individuals who do not smoke to be asked to participate in this part of the study. A total of 130 participants will be asked to enroll in this study.

The research will take place only here at Boston Medical Center.

VISIT 1: Screening/Enrollment Visit *(about 1 hour)*

After you review and sign this form, the following things will be done:

- Medical History: We will ask you questions about your medical history. We will also review your medical record to get more information about your medical history and recent lab work so we can confirm that you are eligible for the study.

- Spirometry: You will breathe into a machine that checks how well your lungs work and we will check for any problems with your breathing to make sure it is safe for you to have a bronchoscopy.

- Carbon Monoxide Breath Test (CO Breath Test): You will breathe into a machine that works like a Breathalyzer to confirm that you are not a regular smoker.

- EKG: An electrocardiogram, or EKG, will be done only at screening. An EKG is an electrical tracing of your heart that can show how hard it is working. You will have to lie very still for up to 10 minutes while the EKG is being done.

- Urine collection: We will collect a urine sample to check for use of marijuana and other drugs. If you are able to become pregnant, you will have a urine pregnancy test. We may perform a urine test (or saliva test) to confirm smoking status.

- Blood draw: We may draw a blood sample of up to 40 ml (4 tubes) for screening labs to check if you are eligible for the study. We will look at your HIV viral load, T cell count, CBC (blood count), BUN/Creatinine (blood flow to your kidneys), CMV results (blood virus), and Hepatitis B and C results. You will be told the results of all of these routine tests.

If you are eligible for the study after the screening visit, we will schedule you for your study visit.

VISIT 2: Bronchoscopy Visit *(about 3-5 hours)*

In preparation for the procedure, you should not eat or drink anything starting at midnight the night before. If you take prescription medications, you may take these with a small sip of water the morning before your procedure.

(1) **Bronchoscopy** *(about 1-2 hours)*

Please note that the bronchoscopy and associated procedures take place for research only BMC. The procedure mentioned is not part of standard of care.
The day of the bronchoscopy, before the procedure, if you are able to get pregnant, you will have a urine pregnancy test.

The bronchoscopy procedure will allow us to look at the effects of smoking on the lungs by using a flexible bronchoscopy, which is a narrow flexible tube that we place down your mouth. This tube lets study doctors look at lung air passages. This procedure is commonly used in the evaluation of a variety of lung diseases. **The bronchoscopy procedure will be performed by a trained and experienced pulmonologist (lung doctor). During the entire procedure, he/she will check your blood pressure, heart rate and breathing.**

At this visit we will collect cells from your nose by brushing the inside of your nostril. We will also have you stick out your tongue so we can swab your tongue two times. Lastly, we will have you rinse your mouth with a salty liquid for 30 seconds and spit it into a cup.

A numbing medicine (*local anesthetic*) called lidocaine will be given to numb your mouth, nose, throat, and voice box (*larynx*). After the anesthesia is given, the bronchoscope is passed through the mouth into the lung. The bronchoscope is a thin flexible tube ¼ inch wide and 31 inches long with a lens and camera that allows us to look into and take a sample from the lung from an awake person without much discomfort. We will first perform the bronchoalveolar lavage (BAL) which is done by placing the tip of the tube against the opening of a small part of the lung and 2 oz. of salt water is inserted to wash the airway. This fluid will contain lung secretions and cells and will be sucked back through the bronchoscope and placed into the container. A total of no more than about 8 oz. of salt water will be used. We will then insert a small brush through the same bronchoscope that is already in the lung into a single small air tube and brush off some of the surface cells of your airway. This process is not painful and you will be able to breathe normally during the procedure. You will also receive standard cardiac, oximetry, and blood pressure monitoring during the bronchoscopy.

(2) After the Procedure

After the procedure, the pulmonologist will talk to you about the procedure and tell you if he or she found anything of concern. You will not be able to eat or drink until the numbness in your throat wears off, which usually takes about 1–2 hours. During this time, we will watch you closely.

What will happen if you cannot do the procedure with lidocaine only?

Sometimes your body has trouble tolerating the discomfort that a bronchoscopy causes (such as gag reflex or coughing) after being given topical lidocaine. If this happens after several attempts during the bronchoscopy procedure, we may offer you conscious sedation (lidocaine and anesthesia) in order to help you feel more comfortable during the process. We will schedule you on *another day* to repeat the bronchoscopy procedure with this sedation. With conscious sedation you will most likely be a bit sleepy but remain awake and breathing on your own. This sedation may help minimize the discomfort you may feel as a result of the procedure.

If greater than 3 months have passed before the bronchoscopy is repeated with conscious sedation, we may ask you to return for some additional screening procedures. These include:

- CO Breath Test
- Blood draw
- Urine collection
- EKG
- Spirometry (only if greater than 12 months has elapsed)

What will happen if you do get conscious sedation because lidocaine was notsuccessful?

To do the procedure with conscious sedation the pulmonary doctor and research staff will:

- Check your vital signs (blood pressure, heart rate, and breathing).
- Insert an IV (thin flexible plastic tube) into a vein in your arm. The IV will be used to give you medicine that will relax you and make you sleepy during the procedure.
- Spray your throat with a numbing medication to help prevent gagging while the tube is inserted.

After the procedure, you will be closely monitored in the recovery area, including checks of your breathing and blood pressure. We will watch you closely as the numbness in your throat wears off. You will not be allowed to drive for 12 hours after the procedure. You will need to arrange for someone to escort you home. Your escort must come to the bronchoscopy suite to meet you after your procedure. If you cannot arrange a ride yourself, we can assist you by providing paid transportation, and a member of the study team will escort you home.

(3) **Other Assessments** *(about 1 hour; will be conducted after bronchoscopy completion)*

Questionnaires: You will be asked to fill out answers to questionnaires about alcohol use, smoking, and your lifestyle.

Blood draw: We will draw a blood sample of up to 100 ml (10-12 tubes) using a needle in your arm. The blood will be used to perform immunology and virology tests required for this study. You will not receive the results of the tests since these tests are for research purposes only.

Storage of samples for future use:
In the future, data and specimens collected for this study may be used or shared with other researchers for other health-related studies that are unknown at this time. Any data shared with other researchers will not include your name or other personal identifying information. If the researchers decide to perform further tests with your samples that are not described in this form, all the applicable ethics boards must approve these tests. Allowing future use of your data and specimens is optional. If you do not want study staff to allow researchers to use your data and specimens in the future, you can still participate in this study.

My data and/or specimens may be kept for use in future research to learn about, prevent or treat other health-related problems. Please initial your choice below:

_____ YES _____ NO

Risks and Discomforts

Bronchoscopy: You will have one bronchoscopy procedure in this study. You are likely to experience some minor discomfort or pain in the nose and throat after the effect of the local anesthesia wears off. This rarely last more than 4 to 6 hours and is very mild (much less than the discomfort of a sore throat from a 'cold'). Your voice may also be hoarse for the same length of time and you may have a mild cough.

Other complications from bronchoscopy and bronchoalveolar lavage with brushing happen in fewer than 5 percent of people having the procedure. These include: (1) brief fever that goes away within 24 hours; (2) minor nose bleeding due to passage of the bronchoscope; (3) allergic reactions to any of the pre-medications or local anesthetics including hives, wheezing or anaphylaxis that requires treatment; **(4)** pneumonia; and (5) changes in heart rhythm including rapid pulse or premature beats. Neither heart rhythm changes nor deaths have ever been reported in the doses we use to numb up the nose and lungs. We never exceed a specified limit to the medications to further decrease the likelihood of reaction.

Before and during the procedure, we will try to minimize potential complications by having trained clinical staff monitoring your heart rhythm and blood oxygen concentration and by giving you some extra oxygen.

Conscious Sedation:

Sedation: The most serious risks and complications associated with IV sedation are mostly related to the risk of over sedation. The medications used for sedation during bronchoscopy can cause a temporary slowing of your heart rate or breathing, or a drop in blood pressure. Your vital signs (blood pressure, heart rate, and breathing) will be checked frequently during and after the procedure. You may temporarily need oxygen that will be given through your nose with a small plastic tube. Other adverse effects of narcotics include nausea, vomiting, and hypotension. Naloxone and flumazenil readily reverse the adverse effects of narcotics and benzodiazepines, respectively, within minutes.

Allergic reaction: You may have an allergic reaction to one of the medications we use for the procedure. Allergic reactions can be mild or serious, and can even result in death in some cases. Common symptoms of an allergic reaction are rash, itching, skin problems, swelling of the face and throat, or trouble breathing. If you think you are having an allergic reaction, call the study doctor right away.

Amnesia**:** The amnesic effect of IV sedative medications is a common side effect of benzodiazepines and for some patients not remembering what happened during the procedure can make them feel extremely uncomfortable.

IV placement: Sometimes after having an IV, you can have a bruise or redness at the place where the IV was inserted. Rarely, the vein becomes inflamed (red, painful, or swollen) due to infection. This is treated with antibiotics.

Blood draw: Taking blood may cause some discomfort, lightheadedness, bleeding, swelling, or bruising where the needle enters the body, and in rare cases, fainting or infection.

Spirometry: There are no known risks in the testing of lung function. Some people become lightheaded or get a headache when doing more than one test in a row. These feelings go away within a few minutes of finishing the test.

EKG: You may experience mild irritation, slight redness and itching on your skin where the electrodes from the electrocardiogram machine are placed.

Nasal brushing: There may be some discomfort, burning, eye watering, and in rare cases, bleeding where the brush touches your nostril.

Questionnaires: There is a chance that you may feel embarrassed or uneasy by the personal nature of the questions asked in the study. If any questions make you feel this way, please tell a member of the research staff.

Genetic Research: We will be performing limited testing using genetic assays which will help give us information about how airway and blood cells are changed by HIV and smoking. This type of genetic testing does not identify genes related to known genetic diseases or parentage. No results of this testing will be given to you or your healthcare provider.

Risks in Pregnant Women: If you become pregnant while you are participating in this study, it could be dangerous for the baby. If you become pregnant while participating, you will be removed from the study.

Others: There may be unknown risks/discomforts involved. Research staff will update you in a timely

manner about any new information that may affect your health, welfare, or decision to stay in this study.

Potential Benefits

You will receive no direct benefit from being in this study. Your being in this study may help the investigators better understand how smoking affects tissues in people who have HIV.

Costs

There are no costs to you for being in this research study.

Payment

You will receive compensation for your time during the study. These payments will be provided on a ClinCard after each visit is completed. You must give us your Social Security Number or Individual Taxpayer Identification Number to receive this payment.

Visit 1: Screening/Enrollment Visit

- $10 for completing this visit to cover transportation costs

Visit 2: Bronchoscopy Visit

- $225 for completing this visit

If the first attempt at bronchoscopy is unable to be completed, you will receive $50 at the end of this visit. If the pulmonologist determines that a repeat bronchoscopy with conscious sedation may be done, and you agree to come back another day for this, then you will receive the remainder amount of $175 upon completion of this repeat bronchoscopy. The total amount received will be the same as if the procedure was completed in one attempt.

If greater than 3 months have passed between attempts and you have to return for repeat

screening procedures, you will be compensated an additional $10 for that visit.

Confidentiality

We must use information that shows your identity to do this research. Information already collected about you will remain in the study record even if you later withdraw.
We will store your information in ways we think are secure. We will store biological samples taken from your body (such as urine, blood, or tissue) in secure laboratories with access granted only to authorized individuals. We will store paper files in locked filing cabinets. We will store electronic files in computer systems with password protection and encryption. However, we cannot guarantee complete confidentiality.

This study is covered by a Certificate of Confidentiality (CoC) from the National Institutes of Health. All studies funded by the National Institutes of Health that involve identifiable information or biological samples are covered by a CoC. The CoC provides how we can share research information or biological samples. Because we have a CoC, we cannot give out research information or biological samples that may identify you to anyone that is not involved in the research except as we describe below. Even if someone tries to get your information or biological samples in connection with a legal proceeding, we cannot give it to them. The CoC does not prevent you from sharing your own research information.

If you agree to be in the study and sign this form, we will share information and biological samples that may show your identity with the following groups of people:

- People who do the research or help oversee the research, including safety monitoring.
- People from Federal and state agencies who audit or review the research, as required by law. Such agencies may include the U.S. Department of Health and Human Services, the Food and Drug Administration, the National Institutes of Health, and the Massachusetts Department of Public Health.
- People who see your medical records.
- Any people who you give us separate permission to share your information.

We will share research data where we have removed anything that we think would show your identity. There still may be a small chance that someone could figure out that the information is about you. Such sharing includes:

- Publishing results in a medical book or journal.
- Adding results to a Federal government database.
- Using research data in future studies, done by us or by other scientists.
- Using biological samples in future studies, done by us or by other scientists.

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.

Use and Disclosure of Your Health Information

The research team has to use and share your health information to do this study, including information that may identify you. By agreeing to be in this study and signing this form, you are giving us your permission where needed to use and share your health information as described in this form.
Health information that might be used or given out during this research includes:

- Information that is in your hospital or office health records. The records we will use or give out are those related to the aims, conduct, and monitoring of the research study.
- Health information from tests, procedures, visits, interviews, or forms filled out as part of this research study.
- The health information specifically includes:
  - HIV/AIDS information

The reasons that your health information might be used or given out to others are:

- To do the research described here.
- To make sure we do the research according to certain standards set by ethics, law, and quality groups.
- To comply with laws and regulations. This includes safety-related information.

The people and groups that may use or give out your health information are:

- Researchers involved in this research study from Boston Medical Center, Boston University, and/or other organizations
- Other people within Boston Medical Center and Boston University who may need to access your health information to do their jobs such as for treatment, research administration, payment, billing, or health care operations
- People or groups that the researchers use to help conduct the study or to provide oversight for the study
- The Institutional Review Board that oversees the research and other people or groups that are part of the Human Research Protection Program that oversees the research
- Research monitors, reviewers, or accreditation agencies and other people or groups that oversee research information and the safety of the study
- The sponsor(s) of the research study, listed on the first page, and people or groups they hire to help them do the research

We ask anyone who gets your health information from us to protect the privacy of your information. However, we cannot control how they may use or share your health information. We cannot promise that they will keep it completely private.

The time period for using or giving out your health information:

- Because research is an ongoing process, we cannot give you an exact date when we will either destroy or stop using or sharing your health information.

Your privacy rights are:

- You have the right not to sign this form that allows us to use and give out your health information for research. If you do not sign this form, you cannot be in the research. This is because we need to use the health information to do the research. Your decision not to sign the form will not affect any treatment, health care, enrollment in health plans, or eligibility for benefits.
- You have the right to withdraw your permission to use or share your health information in this research study. If you want to withdraw your permission, you must write a letter to the Principal Investigator at the address listed on the first page of this form. If you withdraw your permission, you will not be able to take back information that has already been used or shared with others.

This includes information used or shared to do the research study or to be sure the research is safe and of high quality. If you withdraw your permission, you cannot continue to be in the study.

- When the study has been completed for everyone, you have the right to request access to the health information that we used or shared to make your treatment or payment decisions. If you ask for research information that is not in your medical record, we might not give it to you, but we will explain why not. You may use the contact information on the first page of this form to find out how to get your health information. You may also contact the HIPAA Privacy Officer at Boston Medical Center at DG-privacyofficer@bmc.org or at Boston University at HIPAA@BU.EDU.

Compensation for Injury

If you think that you have been injured by being in this study, please let the investigator know right away. Use the phone number on the first page of this form. You can get treatment for the injury at Boston Medical Center or at any healthcare facility you choose. There is no program to provide compensation for the cost of care for research related injury or for other expenses. Other expenses might be lost wages, disability, pain, or discomfort. You or your insurance will be billed for the medical care you receive for a research injury. You are not giving up any of your legal rights by signing this form.

Re-Contact

We would like to ask your permission to contact you again in the future. This contact would be after the study has ended. Please initial your choice below:

____Yes ____No You may contact me again to ask for additional information related to this study

____Yes ____No You may contact me again to ask for additional biological samples related to this study

____Yes ____No You may contact me again to let me know about a different research study

Subject's Rights

By consenting to be in this study you do not waive any of your legal rights. Consenting means that you have been given information about this study and that you agree to participate in the study. You will be given a copy of this form to keep.

If you do not agree to be in this study or if at any time you withdraw from this study you will not suffer any penalty or lose any benefits to which you are entitled. Your participation is completely up to you. Your decision will not affect your ability to get health care or payment for your health care. It will not affect your enrollment in any health plan or benefits you can get.

During this study, we may find out something that might make you not want to stay in the study. If this happens, we will tell you as soon as possible.

We may decide to have you stop being in the study even if you want to stay. Some reasons this could happen are if staying in the study may be bad for you, or if the study is stopped.

Questions

The investigator or a member of the research team will try to answer all of your questions. If you have questions or concerns at any time, contact the research team at 617-414-3514. Also call if you need to report an injury while being in this research. Contact Dr. Archana Asundi at 857-313-9870, pager 5034, if there is no answer at that phone number or if you are calling after normal business hours.

You may also call 617-358-5372 or email medirb@bu.edu. You will be talking to someone at the Boston Medical Center and Boston University Medical Campus IRB. The IRB is a group that helps monitor research. You should call or email the IRB if you want to find out about your rights as a research subject. You should also call or email if you want to talk to someone who is not part of the study about your questions, concerns, or problems.

Subject: _____
Printed name of subject

By signing this consent form, you are indicating that

- you have read this form (or it has been read to you)
- your questions have been answered to your satisfaction
- you voluntarily agree to participate in this research study
- you permit the use and release of information that may identify you as described, including your health information.

_____
Signature of subject Date

Researcher:
Printed name of person conducting consent discussion

I have personally explained the research to the above-named subject and answered all questions. I believe that the subject understands what is involved in the study and freely agrees to participate.

_____ _____ am / pm
Signature of person conducting consent discussion Date Time

To be completed by witness if researcher reads this form to the subject

This consent form was read to and apparently understood by the subject in my presence.

_____
Printed name of witness (a person not otherwise associated with the study)

Signature of witness Date