SUBJECT INFORMATION AND INFORMED CONSENT FORM
AND
AUTHORIZATION TO DISCLOSE HEALTH INFORMATION

Title:	**A Phase III Multicenter, Open-Label, Randomized Study to Evaluate a Switch to MK-1439A in HIV-1-Infected Subjects Virologically Suppressed on a Regimen of a Ritonavir-boosted Protease Inhibitor and Two Nucleoside Reverse Transcriptase Inhibitors (NRTIs)**
Protocol No:	**MK1439A-024**
Study Sponsor:	**Merck Sharp & Dohme Corp., (a subsidiary of Merck & Co. Inc.)**
Study Doctor:	Pablo Tebas, MD **(215) 662-6059 – Immunodeficiency Program Doctor on call – 24-hour number** **(215) 349-8092 – office number**

You are being invited to take part in a research study. This consent document has information to help you decide if you want to participate. Take your time, read this document carefully, and ask the study doctor or staff any questions you may have. You should not sign this document until you understand all of the information presented in the following pages and until all of your questions about the research have been answered to your satisfaction.

If you are not completely truthful with your study doctor regarding your health history, you may harm yourself by participating in this study.

The study doctor [or institution] will be paid by the Sponsor, Merck Sharp & Dohme Corp., for conducting this study.

The study has been approved by Schulman Associates Institutional Review Board, Inc. Schulman Associates Institutional Review Board, Inc. is an independent committee established to help protect the rights of research subjects.

About This Study

You are being asked to participate in this research study because you have HIV-1.

The purpose of this study is to:

- evaluate the safety and efficacy of a switch to MK-1439A on Study Day 1 compared with the safety and efficacy of continuing a ritonavir-boosted protease inhibitor based-regimen for 24 weeks.

This is a research study to test an investigational drug that has not been approved by the United States Food and Drug Administration (FDA) for sale.

There may be reasons why you are not allowed to take part in this study. Some of these reasons include:

- You are less than 18 years of age.
- You are not HIV-1 positive.
- You have not been receiving a ritonavir-boosted PI based-regimen (atazanavir, darunavir or lopinavir along with ritonavir) and 2 NRTIs (non-nucleoside reverse transcriptase inhibitors) for treatment of your HIV-1.
- You have a history or current evidence of any condition that might confound the results of the study or interfere with your participation for the full duration of the study.
- You are a current user of recreational or illicit drugs or have had a recent history of drug or alcohol abuse or dependence. Talk to the study doctor if you have a history of drug or alcohol use.
- You have been treated for a viral infection other than HIV-1, such as hepatitis B, with an agent that is active against HIV-1 including, but not limited to, adefovir, emtricitabine, entecavir, lamivudine or tenofovir.
- You have documented or known resistance to study drugs including MK-1439, lamivudine, and/or tenofovir.
- You have participated in a study with an investigational compound/device within 30 days prior to signing informed consent or anticipate participating in such a study involving an investigational compound/device during the course of this study.
- You have used certain immune suppressing drugs within 30 days prior to treatment in this study or it is anticipated that you will need them during the course of the study.
- You require or are anticipated to require any medications not allowed by the study protocol (written study plan). Your study doctor or his/her staff can discuss these with you.

- You have a current (active) diagnosis of acute hepatitis due to any cause.
- You have advanced liver disease as determined by your doctor.
- You are a female who is pregnant, breastfeeding, expecting to conceive, or expecting to donate eggs (at any time during the study) or are a male who is expecting to donate sperm (at any time during the study).
- You have an immediate family member (e.g., spouse, parent/legal guardian, sibling or child) who is investigational site or sponsor staff directly involved with this trial.

The study doctor or staff will discuss these and any other reasons why you may not be allowed to enter the study.

About 660 people will be in the study. You will be in the study about 55 weeks. This study will use competitive enrollment. This means that when a target number of subjects has entered the treatment phase of the study, all further enrollment will be closed.

What will I be asked to do?

If you take part in the study, you will need to do the following:

- Visit the study doctor about 9 times.
- Visit the study doctor as directed during treatment.
- Discuss with the doctor your medical history.
- You will be asked to fast before coming to the doctor's office at certain visits.
- Tell your study doctor about any illnesses or other problems you have during the time you are in the study.
- Tell your study doctor about any medicines you take while you are in the study, including medicines you take with or without a doctor's prescription such as vitamins, herbal supplements, or aspirin.
- Keep a card with you that will let any doctor you see know that you are in a study, so they can find out what the study is about.
- Take study drugs as instructed. MK-1439A is to be taken once daily without regard to food, at approximately the same time each day.
- Store study drug as instructed.
- Write down when you take your study drug on the patient diary card given to you. Bring the diary card and all study drug containers with you to each study visit.
- Complete a Study Medication Diary daily at home and an electronic questionnaire at the clinic during some of your visits.

You will be assigned by chance to either get MK-1439A at Study Day 1 (Immediate Switch Group) or continue on your ongoing regimen of a PI, ritonavir and NRTIs for the first 6 months in the study followed by a switch to MK-1439A at 6 months (Delayed Switch Group). You have approximately a 70% chance of being assigned to the Immediate Switch Group and approximately a 30% chance of being assigned to the Delayed Switch Group. If you are assigned to the Delayed Switch Group, during your enrollment in the study, the sponsor will pay for the cost of your PI regimen that you are receiving for the first 24 weeks of the study. There will be no charge to you (and/or your insurance company, if applicable) during this 24 week period. Following this 24 week period, you will be switched to MK-1439A (the study drug provided at no charge).

Subjects randomized to the Delayed Switch Group will continue on their ongoing regimen of PIs, ritonavir and NRTIs for the first 6 months of the study.

What will happen during the study visits?

When you come in for your study visits, the study doctor or staff may do any or all of the following to test whether the study drug is working and/or to monitor your health:

- Give you a Subject Identification Card.
- Perform an electrocardiogram (ECG) – a measure of the electrical activity of your heart.
- Check to see what medications you are taking or any that you have taken recently.
- Check if you have or have had any serious side effects.
- Confirm if you (or your partner) are using appropriate acceptable methods of birth control.
- Collect blood and urine samples:
    - to test the amount of virus that is in the body.
    - to perform safety tests
    - to test for hepatitis B and C. Positive hepatitis B and C results may be reportable to local health authorities according to local laws.

Your personal information may be given out if required by law. If you test positive for HIV, Hepatitis B or Hepatitis C, by law we have to report the infection to the City of Philadelphia Health Department/PA Department of Health. We would report your name, gender, racial/ethnic background, and the month and year you were born. This is to keep track of how many people in the U.S. have HIV infection. It is also to make sure that states get enough money from the federal government to support the medical care of people living with HIV. The Health Department does not share the names of HIV infected people with anyone else. It removes all personal identifiers, such as your name, before giving information on the number of HIV infections to the federal government. Please note that it is likely that this information has been already reported to the PA Health Department as the HIV test being done for this study is not the first test for you.

  - to perform a pregnancy test.
  - to measure the amount of study drug in your body. This process is known as pharmacokinetics (PK).

- A blood sample will be collected for planned genetic research. Your blood and tissue samples contain genes, which are made up of DNA (deoxyribonucleic acid) and which serve as the "instruction book" for the cells that make up our bodies. Genetic research is the study of DNA variation. Variation in your DNA can affect the way you respond to drug treatments. The Sponsor will look at variation in your DNA. Your DNA will be used to understand how genetics affect response to the treatment(s) administered. Your genetic information will be analyzed together with the clinical data collected in this study. Your blood sample may also be used to help develop new tests. The results are for research use only.
- Dispense study drug and instructions. If you are assigned to the Immediate Switch Group you will receive study drug on the day you are randomized. If you are assigned to the Delayed Switch Group you will continue on your ongoing regimen of PI, ritonavir and NRTIs for the first 6 months in the study and will receive MK-1439A at your Week 24 visit.
- Review your medical and medication history.
- Perform a physical examination.
- Check your vital signs (including blood pressure, heart rate, temperature).
- You will also be asked to take part in optional future biomedical research. You will be asked to read and sign a separate informed consent.

What effects could the tests have on me?

You may feel discomfort during some of these tests or may experience some inconveniences. Some may also have risks, which may include:

- The electrocardiogram (ECG) procedure may cause minimal discomforts during the attachment and removal of the ECG leads to and from the skin.
- Fasting for 8 hours could cause dizziness, headache, stomach discomfort or fainting.
- Blood samples: drawing blood from your arm may cause pain, bruising, bleeding, lightheadedness, and rarely, fainting or infection.

About The Study Drug(s)

MK-1439A

MK-1439A is being studied by the Sponsor to treat HIV-1 infection. MK-1439A is a single tablet made from 3 different drugs. The drugs that are in MK-1439A are MK-1439 (doravirine), lamivudine and tenofovir disoproxil fumarate. Lamivudine and tenofovir disoproxil fumarate have been approved to treat HIV-1 infection, MK-1439 (doravirine) is being studied by the Sponsor.

MK-1439A has been given to about 48 healthy people as a single dose of 100 mg doravirine/300 mg lamivudine/300 mg tenofovir disoproxil fumarate.

MK-1439

MK-1439 is being studied by Merck & Co., Inc. to see if it has any effect in treating HIV-1.

MK-1439 has been given as:

- Single doses up to 1200 mg and multiple daily doses up to 750 mg for 10 days and up to 100 mg for 17 days to about 181 healthy men.
- Single doses up to 100 mg to 86 healthy women, 12 healthy elderly women, 12 healthy elderly men, 6 men and 2 women with moderate hepatic impairment
- Multiple doses up to 200 mg once daily for 7 days without other approved HIV medications to 12 young HIV-1 infected men.
- Multiple doses up to 200 mg once daily in combination with other approved HIV medications (combination therapy) to about 151 male and 15 female HIV-1 infected patients who have never taken HIV drugs before. This study is ongoing; so far, the longest period a patient has taken MK-1439 in this study is about 12 months. In this study, patients will take MK-1439 for up to two years.

Note: Information stated above is regarding an ongoing study.

Lamivudine

Lamivudine is an approved drug available by prescription to treat HIV-1.

Tenofovir

Tenofovir disoproxil fumarate is an approved drug available by prescription. It is used to treat HIV-1 and hepatitis B virus (HBV) infection.

What side effects could the study drug(s) cause?

The following side effects were reported by more than one healthy person who was given MK-1439A, and the study doctor believes they may have been caused by MK-1439A:

- Headache
- Loose stool
- Sleepiness

The side effects seen were mild in intensity.

For MK-1439:

The following side effects have been reported in 2% or more of healthy men and women who were in studies of MK-1439:

- Back Pain
- Dizziness/Dizziness with changes in position
- Headache/migraine
- Diarrhea/loose stools
- Drowsiness
- Muscle or joint pain / stiffness
- Difficulty falling and/or staying asleep
- Fatigue
- Nausea and stomach pain / discomfort
- Neck Pain
- Sudden or mild feeling of heat on upper part of body, lasting 30 – 60 seconds (hot flush)
- Pain swallowing
- Swollen or irritated skin
- Stuffy, runny or uncomfortable nose

The following side effects have been reported more than once by HIV-infected men who were in a study of MK-1439 given alone for 7 days:

- Headache
- Nausea
- Diarrhea

The side effects seen with MK-1439 in healthy people or in HIV-infected men who were given MK-1439 alone were generally mild in intensity and did not last long.

Side effects rated as moderate in intensity were:

- One event of dizziness
- One event of knee pain
- One event of fatigue
- Two events of headache
- One event of inflamed small intestine
- One event of diarrhea
- One event of vomiting
- One event of hot flush

The Following side effect was rated as severe in intensity:

- One person briefly fainted. The study doctor did not think this was related to MK-1439.

The following two side effects were serious:

- One person had changes in blood tests that may show liver damage. The study doctor thought the blood test changes were likely caused by a hepatitis virus infection which the person got before taking MK-1439.
- One person had sarcoidosis (inflammation of lymph nodes, lungs, liver, eyes, skin, or other tissues). The study doctor did not think this was related to MK-1439.

The following side effects were considered related to MK-1439 and occurred in 2% or more of subjects when MK-1439 was given as:

- Doses ranging from 25 mg to 200 mg once daily in combination with other approved HIV medications for up to 48 continuous weeks in 151 HIV-1 infected men and 15 HIV-1 infected women.
- A dose of 100 mg once daily in combination with other approved HIV medications for up to 8 continuous weeks in 51 HIV-1 infected men and 15 HIV-1infected women.

- Abnormal dreams
- Diarrhea/loose stools
- Dizziness
- Difficulty falling and/or staying asleep
- Headache
- Nausea
- Nightmare
- Tiredness

Most of these side effects were mild to moderate in intensity and short lived except for one report of nightmare that was considered severe.

Four patients stopped the drug because of a side effect considered to be related to MK-1439 when given with other antiretroviral drugs:

- 1 due to stupor (almost complete unresponsiveness)
- 1 due to epigastralgias (pain in the upper part of abdomen), insomnia (difficult falling or staying asleep), and nausea
- 1 due to a sleep disorder (disruption in sleep)
- 1 due to hallucinations

For Lamivudine:

The following serious side effects have been reported in some patients that were given lamivudine:

- Inflammation of the pancreas.
- Increased acid in the blood: symptoms may include feeling very weak or tired, unusual muscle pain, trouble breathing, stomach pain with nausea or vomiting, feeling cold (especially in your arms and legs), feeling dizzy or lightheaded, and having a fast or irregular heartbeat.
- Worsening of hepatitis B (for patients that already have hepatitis B).
- Enlarged liver with changes in fat distribution in liver cells.
- Changes in location and amount of body fat.

The most common side effects seen in people who took lamivudine in clinical studies include the following:

- Headache
- Diarrhea
- General feeling of being unwell
- Fever
- Lack of energy
- Nausea
- Nasal congestion
- Cough

Less common side effects seen in people who took lamivudine in clinical studies include the following:

- Chills
- Dizziness
- Mouth inflammation or sores
- Vomiting
- Depression
- Enlarged spleen
- Lack of or decreased appetite
- Rash
- Abnormal breath sounds / wheezing
- Stomach pains / cramps
- Muscle and joint aches and pain
- Ear pain, redness, swelling or discharge
- Indigestion
- Enlarged liver
- Nasal discharge
- Nerve changes that may result in numbness, pain or weakness
- Difficulty falling and/or staying asleep
- Abnormal lymph nodes

The following additional side effects have been seen in people who have taken lamivudine but who were not in studies:

- High blood sugar levels
- Breakdown of muscle cells that cause kidney problems
- Serious, potentially life threatening allergic reaction
- Weakness
- Hair loss
- Hives
- Decrease in the number of cells that carry oxygen
- Itching

<u>For Tenofovir:</u>

The most common side effects seen in people who have taken tenofovir include:

- Rash
- Diarrhea
- Headache
- Itchy skin
- Stomach pain
- Depression
- Pain
- Vomiting
- Weakness

- Dizziness
- Nausea
- Difficulty falling and/or staying asleep
- Fever

Serious side effects that may be life threatening that have been seen in some patients taking tenofovir include:

- Liver problems: symptoms may include your skin or the white parts of your eyes turning yellow, dark urine, light colored stool, loss of appetite for several days or longer, nausea and stomach pain.
- Increased acid in the blood: symptoms may include feeling very weak or tired, unusual muscle pain, trouble breathing, stomach pain with nausea or vomiting, feeling cold (especially in your arms and legs), feeling dizzy or lightheaded, and having a fast or irregular heartbeat.
- New or worsened kidney problems, including kidney failure.
- Bone problems, which may include bone pain or softening or thinning of bones (which may lead to fractures).
- Changes in your body's ability to fight infection.

Less common side effects seen in patients taking tenofovir include:

- Back or chest pain
- Joint pain
- Muscle aches
- Nerve changes that may result in numbness, pain or weakness
- Anxiety
- Upset stomach
- Lack of energy
- Sinus infection
- Upper respiratory tract infection
- Common cold
- Pneumonia
- Sweating
- Weight loss
- Changes in the location and amount of fat throughout the body
- Increased gas
- Loss of desire to eat

The following additional side effects have been seen in people who have taken tenofovir but were not in studies:

- Low levels of potassium in the blood, which can cause muscle cramps or an irregular heart beat
- Allergic reaction (may include rash, hives, swelling, trouble breathing)
- Breakdown of muscle cells that cause kidney problems
- Low phosphate levels, which may cause muscle weakness or breakdown, bone pain and confusion
- Muscle weakness
- Abnormal kidney function causing a loss of fluids
- Inflammation of the pancreas, a gland in the abdomen that produces insulin and substances that help food be digested
- Shortness of breath
- Excess protein in the urine
- Changes in blood test that may show damage to the pancreas, a gland in the abdomen that produces insulin and substances that help food be digested
- Increased urination

Are there any other risks?

Other less common side effects have been reported with the use of the drugs in this study. The study doctor or staff can discuss these with you.

Are there any risks that are not known?

There may be other side effects or risks that are not known at this time when the study drug is taken by itself or with other drugs. Any drug could cause you to have an allergic reaction that could become life-threatening if not treated promptly.

Are there pregnancy risks?

It is not known if the study drug(s) may affect an unborn or nursing baby. If you are pregnant, trying to become pregnant or breast-feeding, you may not be in the study. The study doctor will perform a blood and/or urine pregnancy test before the start of and during the study, if you are able to have a baby.

If you are able to have a baby, and not willing to remain truly abstinent (no sexual intercourse) you must use a reliable birth control method during the study and for a period of 14 days after your last dose of study drug. The following birth control methods are allowed during the study:

Single method (one of the following is acceptable):

- intrauterine device (IUD)
- vasectomy of a female subject's male partner
- contraceptive rod implanted into the skin (this is not acceptable for use if you are assigned to the Delayed Switch Group until you switch to MK-1439A at Study Week 24)

Combination method (requires use of two of the following):

- diaphragm with spermicide (cannot be used in conjunction with cervical cap/spermicide)
- cervical cap with spermicide (only for females that have not birthed a child)
- contraceptive sponge (only for females that have not birthed a child)
- male condom or female condom (cannot be used together)
- hormonal contraceptive: oral contraceptive pill (estrogen/progestin pill or progestin-only pill), contraceptive skin patch, vaginal contraceptive ring, or subcutaneous contraceptive injection (this is not acceptable for use if you are assigned to the Delayed Switch Group until you switch to MK-1439A at Study Week 24)

Use of barrier methods of contraception is strongly encouraged to reduce the risk of HIV-1 transmission during sexual contact.

Contraceptives containing ethinyl estradiol (including contraceptive rods and hormonal contraceptives) cannot be used as a method of birth control for subjects who are taking ritonavir in this study (applicable to subjects in the Delayed Switch Group until they switch to MK-1439A at Study Week 24) due to an interaction between ethinyl estradiol and ritonavir that may reduce the effectiveness of the contraceptives. Therefore, it is recommended that a condom or other nonhormonal method of contraception should be used instead.

If you become pregnant during the study you must notify the study doctor right away. The study drug will be stopped and you will be taken out of the study.

There may be risks if you are male and your partner is pregnant or trying to become pregnant. If you are male and your partner is able to become pregnant, you and your partner must use a reliable birth control method during the study and for a period of 14 days after your last dose of study drug. The following birth control methods are allowed during the study:

Single method (one of the following is acceptable):

- intrauterine device (IUD)
- vasectomy
- contraceptive rod implanted into the skin

Combination method (requires use of two of the following):

- diaphragm with spermicide (cannot be used in conjunction with cervical cap/spermicide)
- cervical cap with spermicide (only for females that have not birthed a child)
- contraceptive sponge (only for females that have not birthed a child)
- male condom or female condom (cannot be used together)
- hormonal contraceptive: oral contraceptive pill (estrogen/progestin pill or progestin-only pill), contraceptive skin patch, vaginal contraceptive ring, or subcutaneous contraceptive injection

Use of barrier methods of contraception is strongly encouraged to reduce the risk of HIV-1 transmission during sexual contact.

If your partner becomes pregnant during the study you must notify the study doctor right away. <u>You must also agree to not donate sperm during the study and through completion of the study.</u>

Additional Information You Need to Know

Will I be told if new information is discovered during the study?

You will be told in a timely manner about significant new information that might affect your decision to stay in the study.

If I am injured from the study drug, who will pay the doctor and hospital bills?

If you are injured as a direct result of the study drug or a procedure required by the study plan, the study sponsor will pay the reasonable (customary treatment) costs of medical treatment.

The sponsor will determine if the injury is caused by the study drug and the reasonableness of the expenses taking into consideration the study doctor's evaluation, other physicians' evaluations of the subject, sponsor's experience with the study drug and other relevant factors.

The study sponsor or the University of Pennsylvania has no plans to provide any other form of compensation. You will not lose any of your legal rights or release the Sponsor, the study doctor, the study staff, or study site from liability for mistakes or intentional misconduct by signing this consent document.

If you are injured during this study, your study doctor will discuss with you the available medical treatment options.

What benefits could there be from taking part in the study?

If the study drug works, you may have some benefit. If the study drug does not work, you may not benefit. Information learned from the study may help other people in the future.

Will I be paid?

You will receive a payment of 50 dollars per visit to help cover the cost of travel and expenses (which may include such things as parking, baby sitting, time off from work, meals, etc., If all study required visits are completed, the total compensation for the study would be $450. As part of this study you will be given the option to receive a ClinCard (similar to a debit card). If you choose to receive the ClinCard, you will be given a separate consent to describe this program.

Please note that if you receive more than $600.00 compensation in one calendar year for participation in research studies at the University of Pennsylvania, you must provide an Individual Tax Identification Number or Social Security Number for tax purposes.

As part of this study you will be provided with a Study Supply Carry All Bag. You may retain the items regardless if you complete the entire study.

Will there be any charge for me to be in this study?

Some of the tests or treatments used in this study may be part of your routine medical care used to maintain your health even if you did not take part in this study. You or your insurance company may be billed for the cost of this routine medical care.

What are my options if I am not in the study?

You do not have to be in this study to receive treatment for your HIV infection. If you should decide not to participate in, or if you withdraw from this study, your options include:

- Alternative treatments for HIV infection include combinations of several medications given either as separate pills or in combination tablets. Typical treatments include 2 drugs from the nucleoside/nucleotide reverse transcriptase inhibitors (NRTI) class and a drug from the non-nucleoside reverse transcriptase inhibitor (NNRTI), the protease inhibitor (PI) or the integrase inhibitor (InSTI) class. Your doctor will prescribe the best option according to the medications that are available, taking into account your personal condition and the treatment recommendations in your country.

If you have questions about alternate treatments and their potential benefits and risks, ask the study doctor for additional information.

The study doctor will discuss the risks and benefits of these options with you.

Who will be able to see my records and know that I am in the study?

Information from this study will be given to the sponsor. It will also be given to the U.S. Food and Drug Administration (FDA). Unless otherwise required by law, medical records which identify you and the consent document signed by you may be looked at and/or copied for research or regulatory purposes by:

- the study doctor and staff;
- the study sponsor;
- those working for or with the sponsor;
- the institutional review board; and
- government agencies in other countries where the study drug may be considered for approval

Because of the need to release information, complete confidentiality cannot be promised. The study results may be published in medical journals or presented at medical meetings, but your identity will not be revealed.

A more detailed explanation of how health information about you will be used and shared is included in a separate document called an Authorization**.** If you decide not to sign the Authorization you will not be permitted to participate in the study.

The authorization part of the consent gives more detailed information about how your personal health information may be used and disclosed by the University of Pennsylvania Health System (UPHS), the School of Medicine and the individual Principal Investigator, subject to University of Pennsylvania procedures.

What personal health information is collected and used in this study and might also be disclosed?

The following personal health information will be collected, used for research, and may be disclosed during your involvement with this research study:

- Name, address, telephone number, date of birth
- Social Security Number (if you receive more than $600 for participating in studies at PENN, we will need your SSN for the W-9)
- Personal and family medical history
- Current and past medications or therapies
- Results of physical exams, laboratory tests and procedures you will undergo during this research study

Why is your personal contact and health information being used?

Your personal contact information is important for the research team to contact you during the study. Your personal health information and results of tests and procedures are being collected as part of this research study. In some situations, your personal health information might be used to help guide your medical treatment.

Which of our personnel may use or disclose your personal health information?

The following individuals may use or disclose your personal health information for this research study:

The Principal Investigator and the Investigator's study team

Authorized members of the workforce of the UPHS and the School of Medicine, and University of Pennsylvania support offices, who may need to access your information in the performance of their duties (for example: for research oversight and monitoring, to provide treatment, to manage accounting or billing matters, etc.).

Who, outside of UPHS and the School of Medicine, might receive your personal health information?

As part of the study, the Principal Investigator, the study team and others listed above, may disclose your personal health information, including the results of the research study tests and procedures. This information may be disclosed to those listed below:

Individuals or organizations responsible for administering the study:

- Pharmaceutical sponsor (Merck Sharp & Dohme Corp) and those working for or with the sponsor, which may include affiliates of the sponsor located in your country or other countries. An affiliate of the sponsor includes all companies directly or indirectly owned byMerck & Co., Inc.. The sponsor is the company that supplies drugs for the study. Information regarding safety and adverse effects needs to be collected and monitored. The sponsor and those working for or with the sponsor, which may include affiliates of the sponsor, may use the health data sent to them to see if the study drug works and is safe; to compare the study drug to other drugs; to develop new tests; for other activities (such as development and regulatory) related to the study drug. For these uses, sponsor may share this health data with others involved in these activities as long as they agree to only use the health data as described here. The sponsor and those working for or with the sponsor, which may include affiliates of the sponsor may transfer health data about you from your country to other countries where privacy laws are not as strict.

- Contract Research Organization: Monitors will visit the site on a regular basis to review data and assure accuracy and completeness of information before the data are analyzed.

Regulatory and safety oversight organizations

The Food and Drug Administration and regulatory and government agencies in other countries

The Office of Human Research Protections

The Study Monitoring Committee

Ethics committees that oversee the research

Once your personal health information is disclosed to others outside of UPHS or the School of Medicine, it may no longer be covered by federal privacy protection regulations. Data are reported to the sponsor on Case Report Forms that identify you by your unique study number and not your name or medical record number. Information regarding your health, such as side effects of the study medications you experience will be reported only by code number. All samples collected for analysis will be labeled with your study number, visit number and date of your visit.

The Principal Investigator or study staff will inform you if there are any additions to the list above during your active participation in the trial. Any additions will be subject to University of Pennsylvania procedures developed to protect your privacy.

How long may UPHS and the School of Medicine be able to use or disclose your personal health information?

Your authorization for use of your personal health information for this specific study does not expire.

Your information may be held in a research repository (database). However, UPHS and the School of Medicine may not re-use or re-disclose information collected in this study for a purpose other than this study unless:

- You have given written authorization to do so
- The University of Pennsylvania's Institutional Review Board grants permission after ensuring that appropriate privacy safeguards are in place
- As permitted by law

Will you be able to access your records?

You will be able to access some or all of your medical records after the study is over. The Principal Investigator is not required to release research information to you that is not part of your medical record.

Can you change your mind?

Yes, at any time you may withdraw your approval to allow the use and disclosure of your personal health information as described here. You must do so in writing to the Principal Investigator at the address on the first page. Even if you withdraw your permission, your personal health information that was collected before we received your written request may still be used and disclosed, as necessary for the study. If you withdraw your permission to use your personal health information, you will also be withdrawn from the research study.

If you withdraw your permission to use any blood or tissue obtained for the study, the Sponsor may need to retain and use any samples that have already been collected to comply with its legal obligations and to maintain the scientific integrity of the study.

You will be given a copy of this Research Subject HIPAA Authorization describing your confidentiality and privacy rights for this study. You will also be given the UPHS and School of Medicine's Notice of Privacy Practices that contains more information about the privacy of your personal health information.

WHAT IS AN ELECTRONIC MEDICAL RECORD?

An Electronic Medical Record (EMR) is an electronic version of the record of your care within a health system. An EMR is simply a computerized version of a paper medical record.

If you are receiving care or have received care within the University of Pennsylvania Health System (UPHS) (outpatient or inpatient) and are participating in a University of Pennsylvania research study, results of research-related procedures (i.e. laboratory tests, imaging studies and clinical procedures) may be placed in your existing EMR maintained by UPHS.

If you have never received care within UPHS and are participating in a University of Pennsylvania research study that uses UPHS services, an EMR will be created for you for the purpose of maintaining any results of procedures performed as part of this research study. The creation of this EMR is required for your participation in this study. In order to create your EMR, the study team will need to obtain basic information about you that would be similar to the information you would provide the first time you visit a hospital or medical facility (i.e. your name, the name of your primary doctor, the type of insurance you have). Results of research procedures performed as part of your participation in the study (i.e. laboratory tests, imaging studies and clinical procedures) may be placed in this EMR.

Once placed in your EMR, these results are accessible to appropriate UPHS workforce members that are not part of the research team. Information within your EMR may also be shared with others who are determined by UPHS to be appropriate to have access to your EMR (e.g. health insurance company, disability provider, etc).

Will information about this research study be included in a Registry Databank?

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.

Who do I call if I have questions about…

- The study: the study doctor at the telephone number listed on page 1 of this consent document.
- A study-related injury: the study doctor at the telephone number listed on page 1 of this consent document. If you go to the hospital or emergency room, tell the hospital doctor that you are taking part in a research study.

- My rights as a research subject or complaints about the study: Schulman Associates Institutional Review Board at 1-888-557-2472 during business hours Monday – Friday 8:00 a.m. to 6:00 p.m. EST. You may write to Schulman Associates Institutional Review Board Inc. at 4445 Lake Forest Drive, Suite 300, Cincinnati, Ohio 45242.

Can I refuse to be in the study and can I be asked to leave the study?

Your decision to participate in this study is voluntary. You may choose not to participate or you may withdraw from the study for any reason without penalty or loss of benefits to which you are otherwise entitled and without any effect on your future medical care. If you decide to stop taking the study drug, please contact the study doctor. Stopping the study drug or the accompanying drugs without medical supervision could result in a rebound/ increase of the HIV level in your body and, as a consequence, a loss of your immune cells that help fight off serious infections. In addition, there is a greater risk of developing a virus resistant to HIV drugs if they are not taken, changed, or stopped properly.

If at some point you consider withdrawing from the study, you can decide if you are willing to continue to provide information or not. This would be helpful for the purposes of the study. To help you decide, the study doctor/staff can tell you which study procedures and information collection would still apply if you stop taking the study drug, but choose to remain in the study. If you leave the study for any reason, the study doctor may ask you to have some end-of-study tests.

The study doctor or the sponsor can stop your participation at any time without your consent for any reason, including the following:

- If it appears to be medically harmful to you;
- If you fail to follow directions for participating in the study;
- If it is discovered that you do not meet the study requirements;
- If the study is canceled;
- For administrative reasons; or
- If the target number of subjects has entered the study treatment phase.

PRIMARY CARE PHYSICIAN/SPECIALIST NOTIFICATION OPTION

Please indicate below whether you want us to notify your primary care physician or your specialist of your participation in this study.

_____ Yes, I want the study doctor to inform my primary care physician/specialist of my participation in this study.

_____ No, I do not want the study doctor to inform my primary care physician/specialist of my participation in this study.

_____ I do not have a primary care physician/specialist.

_____ The study doctor is my primary care physician/specialist.

By signing below, I agree that:

- I have read and understand this informed consent document.
- I have had the chance to ask questions and they have been answered.
- I understand that taking part in this study is voluntary.
- I voluntarily consent to take part in this research study.
- I may choose not to be in the study or to leave the study at any time by telling the study doctor. I will not be penalized or lose any benefits to which I am otherwise entitled.
- I may have to leave the study without my consent if I need other treatment, do not follow the study plan, have a study-related injury, or for any other reason.
- If I leave the study for any reason, the study doctor may ask me to have some end-of-study tests.
- I give permission to use and share my health data as described in this form.
- I do not give up any of my legal rights by signing this consent document.

I will receive a copy of this signed and dated consent document.

_____	_____	_____
Printed Name of Subject	Signature of Subject	Date (MM/DD/YYYY)
_____	_____	_____
Printed Name of Person Conducting Consent Discussion	Signature of Person Conducting Consent Discussion	Date (MM/DD/YYYY)

CONSENT FOR SUBJECTS WHO CANNOT READ

The study subject has indicated that he/she is unable to read. The consent document has been read to the subject by a member of the study staff, discussed with the subject by a member of the study staff, and the subject has been given an opportunity to ask questions of the study staff.

_____
Printed Name of Impartial Witness

_____ _____
Signature of Impartial Witness* Date

*Impartial Witness: A person, who is independent of the trial, who cannot be unfairly influenced by people involved with the trial, who attends the informed consent process if the subject or the subject's legally acceptable representative cannot read, and who reads the informed consent and any other written information supplied to the subject. **Guidance for Industry E6 Good Clinical Practice: Consolidated Guidance**