UNIVERSITY OF MICHIGAN

CONSENT TO BE PART OF A RESEARCH STUDY

1. KEY INFORMATION ABOUT THE RESEARCHERS AND THIS STUDY

Study title:

PET Imaging of Cholesterol Trafficking: Clinical Evaluation of [18F]FNP-59 in Subjects (Group 3)

Company or agency sponsoring the study:

University of Michigan

Names, degrees, and affiliations of the principal investigator and study coordinator:

Principal Investigator: Benjamin L. Viglianti, M.D., Ph.D.

Study Coordinator**:** James Pool, CCRC

2. PURPOSE OF THIS STUDY

2.1 Study purpose:

The goal of this study is to determine the distribution of [18F]FNP-59 in normal health subjects without and with hormone medication. [18F]FNP-59 is a version of cholesterol and we hope to understand how cholesterol moves through the body and specifically within the adrenal glands for hormone synthesis.

What is PET?

PET is an established scanning technique that uses small amounts of radioactive material, in this study [18F]FNP-59. This radioactive material (also called PET tracer) is injected in one of your veins and then spreads throughout the body. Using such PET scanners, one can see whether the radioactive material shows up in the prostate and elsewhere in the body.

What is CT?

CT utilizes x-rays that travel through your body from the outside. CT images provide an exact outline of your body organs. This scan is needed to produce high-quality PET images.

What is PET/CT?

PET/CT merges PET and the CT scanners into a single device. It is a clinically accepted and FDA approved cancer-imaging device and is used in many clinics worldwide.

3. WHO MAY PARTICIPATE IN THE STUDY

Taking part in this study is completely **voluntary**. You do not have to participate if you don't want to. You may also leave the study at any time. If you leave the study before it is finished, there will be no penalty to you, and you will not lose any benefits to which you are otherwise entitled.

3.1 Who can take part in this study?

Any adult (18 yrs or greater) male or non-pregnant female without known abnormal adrenal pathology.

You cannot take part in this study if you:

- Are pregnant
- Are unable to undergo PET imaging
- Have a body weight greater than 400 lbs (181 kg)
- Are a prisoner
- Are unable to provide your own consent
- Are currently taking steroids, oral contraceptive pills, spironolactone, estrogen, androgen, progesterone, ACE inhibitors, supplements that are hormone analogues, or have an IUD
- Have known abnormal adrenal pathology, such as Cushing's disease, Addison disease or Conn Syndrome

3.2 How many people are expected to take part in this study?

Total of 12 subjects are expected to take part in this group of the study (Group 3)

4. INFORMATION ABOUT STUDY PARTICIPATION

4.1 What will happen to me in this study?

If you agree to participate you will have a PET/CT scan at Michigan Medicine. You will arrive at the Nuclear Medicine Division in the Department of Radiology in the morning on the first day of the study (Day 0). If you are a female of child-baring potential, you will be given a urine pregnancy test prior to the PET/CT to rule out pregnancy. An intravenous catheter will be placed. Initial blood work (adrenal hormone levels) may be obtained and covered by the study.

You will be taken to the PET CT scanner room and lay down on the table. The technologist will get the scanner ready. You will be injected with cosyntropin (250 imcro-gm). Approximately five minutes after the injection, you will then be injected with [18F]FNP-59 and imaging will occur where we will ask you to lay still for 30 minutes.

All patients will be imaged 3 hours after injection of [18F]FNP-59. Six of the twelve patients will also be imaged at 1 hour after injection and the other six patients at 6 hours after injection, chosen at random. During this time we may also obtain blood samples from you to measure the level of [18F]FNP-59 in your blood in relation to the images.

If significant [18F]FNP-59 uptake is seen with cosyntropin compared to uptake of [18F]FNP-59, approximately 2-5 days later you will return to the Nuclear Medicine Division in the morning for a second PET/CT without cosyntropin lasting the same amount of time and involving the same blood samples as Day 0 imaging listed above.

You will be contacted again the following day inquiring about any side effects. After this phone call you study participation would be complete.

4.2 How much of my time will be needed to take part in this study?

From the time arriving in the department (day 0) to study completion (day 4 if needed) should take no longer than 8 hours per day.

4.3 When will my participation in the study be over?

Study participation is complete when you leave the department. You will receive a phone call the following day to check that there are no side effects to the study drug.

4.4 What will happen with my information and/or biospecimens used in this study?

With appropriate permissions, your biospecimens and collected information may also be shared with other researchers, here, around the world, and with companies.

Your identifiable private information or identifiable biospecimens may be stripped of identifiers and used for future research studies or distributed to another researcher for future research studies without additional informed consent.

5. INFORMATION ABOUT STUDY RISKS AND BENEFITS

5.1 What risks will I face by taking part in the study? What will the researchers do to protect me against these risks?

The known or expected risks are:

- Pain at the puncture site from intravenous catheter placement
- Infection at the puncture site for the catheters.
- Discomfort during imaging.
- Side effect of study drug [18F]FNP-59. There are no expected side effects associated with this study drug; however, the most common side effect could possibly be an allergic reaction that may cause shortness of breath and/or a faster heartbeat.
- Side effect of Cosyntropin: Repeated Cosyntropin use can result in high blood pressure, fluid retention similar to steroids, and redness at the injection site. Rare reports of anaphylactic reaction could occur. However, given this is a one-time use we are not expecting this reaction and we will be monitoring you for several hours so unobserved anaphylactic reactions should not occur.
- Radiation exposure: During the course of this study, as a result of the imaging procedures to be carried out for research reasons, you will be exposed to radiation in the form of beta and gamma rays. The

biological effect of radiation is measured in terms of Sieverts (Sv) or mSv (1/1000 Sv). The PET/CT scanner has two components: both the CT portion of the scan and the PET portion of the scan expose you to a small amount of radiation.

The radiation exposure you will be exposed to in this study will be 4.3 mSv for each IV injection of [18F]FNP-59 (2 total) and 5.3 mSv for the CT portion of each PET/CT scan (4 total) for a grand total of 29.7 mSv . The effects on the body of this radiation exposure will be added to your overall lifetime radiation risk. Your life-time radiation risk includes the background radiation you are exposed to naturally like everyone else living on this planet, which is on the average 3 mSv per year. The US Federal Government requires that the annual amount of radiation exposure of radiation workers does not exceed 50 mSv per year. The radiation you will be exposed to in this study is a little more than one-half this amount.

If a potentially significant, unexpected finding is discovered on the CT or PET image or if there is an abnormal finding revealed in your blood work, you and your primary care physicians will be notified by telephone or in person. If you do not have a primary care physician the study team will assist you in following up for evaluation.

The researchers will try to minimize these risks by:

- All placement of catheter will use standard aseptic technique to minimize infections.
- This is the first time the tracer is being used in humans. Side effects from the study drug is minimized by using 1/1000th the dose that was tested for safety in animals. If you experience any signs of allergic reaction to the study drug, you will be monitored by UM staff during your 8 hour stay at Michigan Medicine on the day of the PET/CT scan.

Additionally, there may be a risk of loss to confidentiality or privacy. See Section 9 of this document for more information on how the study team will protect your confidentiality and privacy.

As with any research study, there may be additional risks that are unknown or unexpected.

5.2 What happens if I get hurt, become sick, or have other problems as a result of this research?

The researchers have taken steps to minimize the risks of this study. Even so, you may still have problems or side effects, even when the researchers are careful to avoid them. Please tell the researchers listed in Section 10 about any injuries, side effects, or other problems that you have during this study. You should also tell your regular doctors**.**

5.3 If I take part in this study, can I also participate in other studies?

Being in more than one research study at the same time, or even at different times, may increase the risks to you. It may also affect the results of the studies. You should not take part in more than one study without approval from the researchers involved in each study.

5.4 How could I benefit if I take part in this study? How could others benefit?

You may not receive any personal benefits from being in this study. However, others may benefit from the knowledge gained from this study.

5.5 Will the researchers tell me if they learn of new information that could change my willingness to stay in this study?

Yes, the researchers will tell you if they learn of important new information that may change your willingness to stay in this study. If new information is provided to you after you have joined the study, it is possible that you may be asked to sign a new consent form that includes the new information.

6. ALTERNATIVES TO PARTICIPATING IN THE STUDY

6.1 If I decide not to take part in this study, what other options do I have?

If you decide not to take part in this study, you will not undergo the research PET/CT scan. You may still undergo any scan or treatment your doctor may have ordered for you or participate in any other research projects.

7. ENDING THE STUDY

7.1 If I want to stop participating in the study, what should I do?

You are free to leave the study at any time. If you leave the study before it is finished, there will be no penalty to you. You will not lose any benefits to which you may otherwise be entitled. If you choose to tell the researchers why you are leaving the study, your reasons for leaving may be kept as part of the study record. If you decide to leave the study before it is finished, please tell one of the persons listed in Section 10 "Contact Information".

7.2 Could there be any harm to me if I decide to leave the study before it is finished?

None, however, if you have received the study drug we will still plan to contact you to make sure that there are no side effects.

7.3 Could the researchers take me out of the study even if I want to continue to participate?

Yes. There are many reasons why the researchers may need to end your participation in the study. Some examples are:

- The researcher believes that it is not in your best interest to stay in the study.
- You become ineligible to participate.
- Your condition changes and you need treatment that is not allowed while you are taking part in the study.
- You do not follow instructions from the researchers.
- The study is suspended or canceled.

8. FINANCIAL INFORMATION

8.1 Who will pay for the costs of the study? Will I or my health plan be billed for any costs of the study?

The study will pay for research-related items or services that are provided only because you are in the study. If you are not sure what these are, see Section 4.1 above or ask the researchers for a list. If you get a bill you think is wrong, call the researcher's telephone number listed in Section 10.1.

If you are injured or in the event of a medical emergency, dial 911 or visit your nearest Emergency Room. If you believe the study has made you sick or caused you injury, contact one of the people listed in section 10 of this document (Contact Information). If taking part in the study makes you sick or causes you injury, you or your insurance provider will be billed for all costs of treatment as the study does not provide compensation for sickness or injury caused by the study. It is possible that your insurance will not cover these costs.

You or your health plan will pay for all the things you would have paid for even if you were not in the study, like:

- Health care given during the study as part of your regular care
- Items or services needed to give you study drugs or devices
- Monitoring for side effects or other problems
- Deductibles or co-pays for these items or services.

If you do not have a health plan, or if you think your health plan may not cover these costs during the study, please talk to the researchers listed in Section 10 below or call your health plan's medical reviewer.

By signing this form, you do not give up your right to seek payment if you are harmed as a result of being in this study.

8.2 Will I be paid or given anything for taking part in this study?

You will receive 250 dollars for the first day of imaging completed, followed by another 250 dollars for the second day of imaging completed, for a grand total of 500 dollars (US) for your participation. Payment can be made by payment voucher for cash or by check. Vouchers can be exchanged for cash at the University of Michigan Hospital Cashier's Office. Checks will be processed and mailed to you following your PET/CT scan.

Overnight accommodations may be provided depending on personal circumstances or if you live far away. We will discuss with you the need for these circumstances as the research appointments are being arranged. Overnight lodging can be arranged through the UMHS Patient and Visitor Accommodations Program by a study team member. However, you may decide to make alternative arrangements.

8.3 Who could profit or financially benefit from the study results?

The company whose product is being studied: None

The researchers conducting the study: None

The University of Michigan: None

Research can lead to new discoveries, such as new tests, drugs, or devices. Researchers, their organizations, and other entities, including companies, may potentially benefit from the use of the data or discoveries. You will not have rights to these discoveries or any proceeds from them.

9. CONFIDENTIALITY OF SUBJECT RECORDS AND AUTHORIZATION TO RELEASE YOUR PROTECTED HEALTH INFORMATION

The information below describes how the confidentiality of your research records will be protected in this study, and any sub-studies described in this document.

9.1 How will the researchers protect my information?

All research records will be kept in a locked room in a locked cabinet with limited access and/or in a password protected computer program. Only those directly involved with this research study will have access to the research records and password.

Your participation will occur at Michigan Medicine.

Your data will be kept confidential, to the extent permitted by applicable laws, in the following manner:

- Your name will not be used in any reports about the study
- You will be identified only by a study code (usually a subject ID number and/or initials)
- Your identifying information will be kept secure

Michigan Medicine will use the study data for research purposes to support the scientific objectives of the study.

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.

9.2 What protected health information (PHI) about me could be seen by the researchers or by other people? Why? Who might see it?

Signing this form gives the researchers your permission to obtain, use, and share information about you for this study, and is required in order for you to take part in the study.

Medical information and billing records are protected by the privacy regulations of the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA). This type of information is called protected health information (PHI). PHI about you may be obtained from any hospital, doctor, and other health care provider involved in your care, including:

- Demographic information
- Personal identifiers

There are many reasons why information about you may be used or seen by the researchers or others during or after this study. Examples include:

- The researchers may need the information to make sure you can take part in the study.
- The researchers may need the information to check your test results or look for side effects.
- University, Food and Drug Administration (FDA) and/or other government officials, auditors, and/or the IRB may need the information to make sure that the study is done in a safe and proper manner.
- Study sponsors or funders, or safety monitors or committees, may need the information to:
    - Make sure the study is done safely and properly
    - Learn more about side effects
    - Analyze the results of the study
- Insurance companies or other organizations may need the information in order to pay your medical bills or other costs of your participation in the study.
- The researchers may need to use the information to create a databank of information about your condition or its treatment.
- Information about your study participation may be included in your regular UMHS medical record.
- If you receive any payments for taking part in this study, the University of Michigan accounting department may need your name, address, Social Security number, payment amount, and related information for tax reporting purposes.
- Federal or State law may require the study team to give information to government agencies. For example, to prevent harm to you or others, or for public health reasons.

The results of this study could be published in an article, but would not include any information that would let others know who you are.

9.3 What happens to information about me after the study is over or if I cancel my permission to use my PHI?

As a rule, the researchers will not continue to use or disclose information about you, but will keep it secure until it is destroyed. Sometimes, it may be necessary for information about you to continue to be used or disclosed, even after you have canceled your permission or the study is over.

Examples of reasons for this include:

- To avoid losing study results that have already included your information
- To provide limited information for research, education, or other activities. (This information would not include your name, social security number, or anything else that could let others know who you are.)

- To help University and government officials make sure that the study was conducted properly

As long as your information is kept within the University of Michigan Health System, it is protected by the Health System's privacy policies. For more information about these policies, ask for a copy of the University of Michigan "Notice of Privacy Practices". This information is also available on the web at http://www.uofmhealth.org/patient+and+visitor+guide/hipaa. Note that once your information has been shared with others as described under Question 9.2, it may no longer be protected by the privacy regulations of the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA).

9.4 When does my permission to use my PHI expire?

Your permission expires at the end of the study, unless you cancel it sooner. You may cancel your permission at any time by writing to the researchers listed in Section 10 "Contact Information" (below). If you withdraw your permission, you may no longer be eligible to participate in this study.

10. CONTACT INFORMATION

10.1 Who can I contact about this study?

Please contact the researchers listed below to:

- Obtain more information about the study
- Ask a question about the study procedures or treatments
- Talk about study-related costs to you or your health plan
- Report an illness, injury, or other problem (you may also need to tell your regular doctors)
- Leave the study before it is finished
- Express a concern about the study

Principal Investigator: Benjamin L. Viglianti, M.D., Ph.D.
Mailing Address: Department of Radiology, Division of Nuclear Medicine
1500 E. Medical Center Dr. Ann Arbor, MI 48109
Telephone: 734-936-4000

Study Coordinator: James Pool, CCRC
Mailing Address: 1500 E. Medical Center Dr. CVC 5583 Ann Arbor, MI 48109
Telephone: 734-615-7391

You may also express a question or concern about a study by contacting the Institutional Review Board listed below:

University of Michigan Medical School Institutional Review Board (IRBMED)
2800 Plymouth Road
Building 520, Room 3214
Ann Arbor, MI 48109-2800
Telephone: 734-763-4768 (For International Studies, include the appropriate calling codes.)
Fax: 734-763-1234
e-mail: irbmed@umich.edu

If you are concerned about a possible violation of your privacy or concerned about a study you may contact the University of Michigan Health System Compliance Help Line at 1-866-990-0111.

When you call or write about a concern, please provide as much information as possible, including the name of the researcher, the IRBMED number (at the top of this form), and details about the problem. This will help University officials to look into your concern. When reporting a concern, you do not have to give your name unless you want to.

11. RECORD OF INFORMATION PROVIDED

11.1 What documents will be given to me?

Your signature in the next section means that you have received copies of all of the following documents:

- This "Consent to be Part of a Research Study" document. (*Note: In addition to the copy you receive, copies of this document will be stored in a separate confidential research file and may be entered into your regular University of Michigan medical record.)*

12. SIGNATURES

Consent to Participate in the Research Study

I understand the information printed on this form. I have discussed this study, its risks and potential benefits, and my other choices with _____. My questions so far have been answered. I understand that if I have more questions or concerns about the study or my participation as a research subject, I may contact one of the people listed in Section 10 (above). I understand that I will receive a copy of this form at the time I sign it and later upon request. I understand that if my ability to consent or assent for myself changes, either I or my legal representative may be asked to re-consent prior to my continued participation in this study.

Print Legal Name: _____

Signature: _____

Date of Signature (mm/dd/yy): _____

Principal Investigator or Designee

I have provided this participant and/or his/her legally authorized representative(s) with information about this study that I believe to be accurate and complete. The participant and/or his/her legally authorized representative(s) indicated that he or she understands the nature of the study, including risks and benefits of participating.

Printed Legal Name: _____

Title: _____

Signature: _____

Date of Signature (mm/dd/yy): _____