PRINCIPAL INVESTIGATOR:	Freddy E. Escorcia, MD, PhD
STUDY TITLE:	^{18}F-DCFPyL PET/CT in Hepatocellular Carcinoma
STUDY SITE:	NIH Clinical Center
Cohort:	Affected Patient
Consent Version:	12/01/2023

WHO DO YOU CONTACT ABOUT THIS STUDY?

Principal Investigator:

Freddy E. Escorcia, MD, PhD
Phone: 240-858-3062
E-mail: freddy.escorcia@nih.gov

KEY INFORMATION ABOUT THIS RESEARCH

This consent form describes a research study and is designed to help you decide if you would like to be a part of the research study.

You are being asked to take part in a research study at the National Institutes of Health (NIH). This section provides the information we believe is most helpful and important to you in making your decision about participating in this study. Additional information that may help you decide can be found in other sections of the document. Taking part in research at the NIH is your choice.

You are being asked to take part in this study because your doctors have determined that you may have hepatocellular carcinoma (HCC) based on previous standard imaging.

The purpose of this study is to see if an experimental radiotracer called ^{18}F-DCFPyL can identify sites of HCC better than the currently available standard imaging. A radiotracer is a radioactive substance used in Positron Emission Tomography (PET) imaging to help visualize specific sites in your body.

The use of ^{18}F-DCFPyL in this study is investigational, which means that it has not been approved by the U.S. Food and Drug Administration (FDA) for use in patients with HCC. However, the FDA has given us permission to use ^{18}F-DCFPyL in this study.

There are other standard imaging methods that may be used to identify your disease, and these can be done by your regular cancer doctor, even if you are not in this study, for example, CT or MRI. The main side effects associated with ^{18}F-DCFPyL that may differ from other standard imaging is the amount of radiation.

If you decide to join this study, here are some of the most important things that you should know that will happen:

- Before you begin study imaging, you will need to have certain exams and tests to make sure you are eligible for this study. Once you are determined to be eligible, you will have

an initial ^{18}F-DCFPyL PET/CT , an ^{18}F-FDG PET/CT (within approximately two weeks before or after the ^{18}F-DCFPyL PET/CT) and a CT scan and/or MRI (within 2 months of ^{18}F-DCFPyL PET/CT). Your study doctor or regular doctor will schedule you for standard treatment for your cancer. You will have a biopsy performed just before this treatment procedure to collect samples from your tumor (or tumors if more than one) to confirm your diagnosis and for research purposes. This biopsy may be done either at the NIH Clinical Center or our participating site, Washington DC Veteran' Affair Medical Center. If your HCC diagnosis is confirmed by the biopsy and if we were able to identify your cancer in the first ^{18}F-DCFPyL PET/CT, a second set of imaging (^{18}F-DCFPyL PET/CT, ^{18}F-FDG PET/CT, and CT/MRI) will be performed during your post treatment follow-up.

- You may experience side effects from taking part in this study. Some can be mild or very serious, temporary, long-lasting, or permanent, any may include death. Examples of some of the side effects that you may have include: allergic reaction, fatigue, headache, nausea, change in your sense of taste, discomfort from lying on hard surface for imaging, pain or infection at the site of injection or blood draw.
- You will be seen regularly during the study. You will have clinical, laboratory, and imaging tests to see how you are doing and to assess your disease. We will also collect required samples from you (such as tumor tissue and blood) for both clinical and research purposes.
- After your last ^{18}F-DCFPyL PET/CT, follow-up visits will be performed every 3 months for 2 years, and yearly afterwards for another 3 years. We will follow you for tumor markers and to check (through standard imaging) if you have a recurrence of your cancer over a 5-year period from the first ^{18}F-DCFPyL PET/CT. If you have a cancer recurrence, a set of imaging (^{18}F-DCFPyL PET/CT, ^{18}F-FDG PET/CT, CT/MRI), blood and urine collection, and a biopsy (of your tumor(s)) may be performed at the discretion of the Principal Investigator (PI).

You may not benefit from taking part in this study. This study and the results from our research may help others in the future.

You are free to stop participating in the trial at any time. If you decide to stop, the study doctor may ask you to agree to certain tests to make sure it is safe for you to stop.

The remaining document will now describe the research study in more detail. This information should be considered before you make your choice. Members of the study team will talk with you about the information in this document. Some people have personal, religious, or ethical beliefs that may limit the kinds of medical or research interventions in which they would want to participate. Take the time you need to ask any questions and discuss this study with NIH staff, and with your family, friends, and personal health care providers.

IT IS YOUR CHOICE TO TAKE PART IN THE STUDY

You may choose not to take part in this study for any reason. If you join this study, you may change your mind and stop participating in the study at any time and for any reason. In either case, you will not lose any benefits to which you are otherwise entitled. However, to be seen at the NIH, you

must be taking part in a study or are being considered for a study. If you do choose to leave the study, please inform your study team to ensure a safe withdrawal from the research.

WHY IS THIS STUDY BEING DONE?

The purpose of this research study is to see if an experimental radiotracer called ^{18}F-DCFPyL can identify sites of hepatocellular cancer (HCC) better than the currently available standard imaging. A radiotracer is a radioactive substance used in Positron Emission Tomography (PET) imaging to help visualize specific sites in your body.

We are asking you to join this research study because your doctors have determined that you may have HCC based on previous standard imaging.

^{18}F-DCFPyL is investigational, which means that it has not been approved by the U.S. Food and Drug Administration (FDA) for use in patients with HCC. We are testing it in this research study to see if it can identify hepatocellular cancer sites better than the currently available standard imaging.

WHAT WILL HAPPEN DURING THE STUDY?

Before you begin study imaging

Before you begin this study, you will need to have the following exams and tests to make sure you are eligible for this study. The exams and tests are part of regular cancer care. If you have these tests performed outside NIH, we might use these results and may not need to repeat these tests:

- A review of any past or current medical conditions, medicines you are taking and cancer history.
- Physical examination, vital signs and review of your symptoms and your ability to perform your normal activities.
- Imaging Assessments – a computed tomographic scan (CT) that produces a picture of your body using a small amount of radiation and/or magnetic resonance imaging (MRI) that uses a magnetic field to produce an image of your body.
- You will have blood drawn for routine blood tests to find out if you are anemic, have low blood counts, and if your kidneys, and other organs are working well. Up to 1 tablespoon of blood may be collected.
- If you are a woman of childbearing age, you will have a pregnancy test.

If we find you are not eligible after the tests are performed, you will be removed from the study.

During study imaging

Initial ^{18}F-DCFPyL PET/CT

Once you are determined to be eligible for the study, you will have a whole body PET/CT performed during your first study visit at the NIH Clinical Center. The CT scanner is a doughnut-shaped machine that uses x-rays to create computer pictures showing the inside of your body. The PET scanner is a doughnut-shaped machine that uses x-rays combined with a dose of a radioactive substance (tracer) to create computer pictures showing the inside of your body. The radiotracer used for this PET/CT scan is ^{18}F-DCFPyL.

You will first receive an intravenous injection (IV) of ^{18}F-DCFPyL followed by a dynamic CT. About one hour after the ^{18}F- DCFPyL injection, a static PET/CT will be performed.

During these scanning procedures, you will be asked to lie on your back on the scanner table. It is important that you remain very still during these scans. The entire imaging session is expected to take up to 90 minutes and breaks will be permitted as needed.

Interval monitoring for possible adverse events or reactions will be performed starting the time of injection.

When you are finished with the imaging scan, a member of the study team will contact you within 1-3 days to follow-up.

Tumor Biopsy and Second ^{18}F-DCFPyL PET/CT

Your study doctor will schedule you for standard treatment for your cancer. You will have a biopsy performed during this treatment procedure to collect samples from your tumor (or tumors if more than one). This biopsy may be done either at the NIH Clinical Center or Washington DC Veteran' Affair Medical Center. Some of the sample will be used to confirm that you have HCC. The remaining sample will be used for research testing. Please see Biopsy Risks and Additional Research Testing sections for more information regarding the biopsy and research testing that will be done on the sample.

If the biopsy shows that you do not have HCC, you will be removed from the study.

If your HCC diagnosis is confirmed by the biopsy and if we were able to identify your cancer in the first ^{18}F-DCFPyL PET/CT, then a second ^{18}F-DCFPyL PET/CT (including a dynamic CT) will be performed during your first post treatment follow-up (typically within 4 months).

If your HCC diagnosis is confirmed by the biopsy but the first ^{18}F-DCFPyL PET/CT did not identify your cancer, you will not have a second ^{18}F-DCFPyL but we will continue to follow you.

You may receive conscious sedation before undergoing a biopsy. Conscious sedation is usually given to help someone relax and minimize discomfort. It can be given as a pill, a shot, an IV (intravenous catheter, a small plastic tube that is put into a vein, usually in your arm) or even inhaled. You may have to wait up to an hour to start feel the effects depending on how it is given. Once it takes effect, you will be mostly awake, though relaxed or drowsy. You will be monitored throughout the procedure.

CT/MRI Scan

A standard CT or MRI will be performed within 2 months of each ^{18}F-DCFPyL PET/CT. You may get this done with your local doctor or come back to the NIH Clinical Center.

^{18}F-FDG PET/CT

Within approximately two weeks before or after each ^{18}F-DCFPyL PET/CT scan, you will have a ^{18}F-FDG PET/CT. ^{18}F-FDG is a commonly used radiotracer that has been approved by the FDA for use in cancer patients.

You will receive an IV injection of ^{18}F-FDG. About an hour from the ^{18}F-FDG injection, a whole-body PET/CT will be performed. The scan will last about 45 minutes. You will need to come back to the NIH Clinical Center to have this scan done.

Blood Collection

On the days you undergo ^{8}F-DCFPyL PET/CT scan, you will have blood drawn for routine blood tests to find out if you are anemic, have low blood counts, and if your kidneys, and other organs are working well. A little more than one tablespoon of blood will be drawn at each visit.

Standard of Care Treatment

This study aims to compare imaging of HCC before and after standard treatment for HCC. The study biopsies will be performed at the same time as this treatment, but the treatment is not a part of this research protocol. Your doctors will arrange for this treatment. The doctors performing the treatment procedure will describe your treatment plan to you in detail before asking you to sign this consent form. You may be asked to sign a separate consent form for any treatment procedures not outlined in this consent.

Additional Research Testing

In addition to the clinical tests that we will conduct, we will also collect samples from you for purposes of research only. The samples are being collected to look at blood markers of tumor activity and to test tumor cells.

The samples included for these studies include:

- Blood (up to three tablespoons at each visit)
- Tumor biopsy sample(s)
- Urine sample

All of your samples collected for research purposes on this study may be used to look for specific changes in the DNA in tumors that could be used to develop new ways of diagnosing and treating cancer. DNA (also called deoxyribonucleic acid) in the cells carries genetic information and passes it from one generation of cells to the next – like an instruction manual. Normal tissue contains the DNA (instructions) that you were born with, DNA in tumor cells has changed – or mutated – and we think that change in the DNA is what causes tumors to form and to grow.

To look at your DNA, we may do what is called "genome sequencing." This where we will do special tests in the lab to look at the entire or pieces of sequence, or order, of how your DNA is put together. This is what makes you unique.

However, you should know that the analyses that we perform in our laboratory are for research purposes only; they are not nearly as sensitive as the tests that are performed in a laboratory that is certified to perform genetic testing or testing for routine clinical care. For these reasons, we will not give you the results of the research tests done on your research samples in most cases. There may be exceptions to what we share with you and this is described later in this consent form in the section for "Return of research results."

HOW LONG WILL THE STUDY TAKE?

If you agree to take part in this study, your involvement is expected to last for approximately *5* years. We may reach out to you by phone, email or ask you to come back to the NIH Clinical Center. We may request you send us records (including blood work and imaging scans) from your local doctor visits. Follow-up visits will be performed every 3 months for 2 years, and yearly

afterwards. We will follow you for tumor markers and to check (through standard imaging) if you have a recurrence of your cancer over a 5-year period from the first ^{18}F-DCFPyL PET/CT.

If you have a recurrence, a set of imaging (^{18}F-DCFPyL PET/CT including a dynamic CT, ^{18}F-FDG PET/CT, CT/MRI) may be performed per PI discretion and blood and urine samples may be collected for research purposes. Should you have another treatment during the follow up period, a biopsy may be done during the treatment procedure per PI discretion.

HOW MANY PEOPLE WILL PARTICIPATE IN THIS STUDY?

We plan to have approximately 50 people participate in this study at the NIH Clinical Center.

WHAT ARE THE RISKS AND DISCOMFORTS OF BEING IN THE STUDY?

Risks related to ^{18}F-DCFPyL

The risks associated with ^{18}F-DCFPyL are as follows:

- Allergic reaction
- Fatigue
- Change in your sense of taste
- Headache

^{18}F-DCFPyL also includes the risk of radiation which is further described in section “What are the risks of radiation from being in the study".

Risks related to ^{18}F-FDG

The risks associated with ^{18}F-FDG are related to radiation and allergic reaction.

Risks related to IV

The risks of IV insertion include temporary pain and bleeding or bruising at the site where the IV enters the skin. In placing the IV, there is a small chance of leaking of ^{18}F-DCFPyL or ^{18}F-FDG into the tissue surrounding the IV and infection, which may cause some swelling and discomfort. Rarely, the IV site may become infected, which might require treatment with antibiotics.

Risks associated with the PET scans

The risks associated with the insertion of the IV include pain at the needle site, bruising, possible dizziness and lowered blood pressure if you stand up quickly, and possible inflammation of the vein or infection at the needle site. Care will be taken to avoid these complications.

Other side effects could include:

- Discomfort from lying on a hard surface for about 45-90 minutes during each PET scan.
- Infection at the IV site or infection in the blood

Even though we do not anticipate adverse side effects, you should tell the doctors or nurses supervising the scan of any discomfort you may have.

What are the risks related to pregnancy?

If you are able to become pregnant, we will ask you to have a pregnancy test before starting this study and as clinically indicated prior to each scan. You must use effective birth control methods and try not to become pregnant during study imaging, and for 2 months after you finish study imaging. If you become pregnant, there may be unknown risks to the fetus or unborn child, or risks that we did not anticipate. There may be long-term effects of the treatment being studied that could increase the risk of harm to a fetus. You must tell the study doctor if your birth control method fails while you are in the study. If you think or know you have become pregnant while participating in this research study, please contact the study team as soon as possible. If you plan to become pregnant in the future, please discuss with the study team how long you need to wait before becoming pregnant after completing the study.

If you are a sexually active person with a partner able to become pregnant, it is important that your partner not become pregnant during study imaging, and for 2 months after you finish study imaging. There may be unknown risks to a fetus or risks we did not anticipate. You and your partner must agree to use birth control if you want to take part in this study. If you think your partner has become pregnant during your participation in this study, please contact the study team as soon as possible. If you and your partner plan for your partner to become pregnant after your participation in this study, please discuss this with the study team.

What are the risks of radiation from being in the study?

During your participation in this research study, you may be exposed to radiation from up to 3 ^{18}F-DCFPyL PET/CTs, up 3 dynamic CTs (done right before the ^{18}F-DCFPyL PET/CTs), up to 3 ^{18}F-FDG PET/CTs, up to3 CT scans and 2 CT guided biopsies. The amount of radiation exposure from these procedures is equal to approximately 12.6 rem. A rem is a unit of absorbed radiation.

Every day, people are exposed to low levels of radiation that come from the sun and the environment around them. The average person in the United States receives a radiation exposure of 0.3 rem per year from these sources. This type of radiation is called “background radiation.” This study will expose you to more radiation than you get from everyday background radiation. No one knows for sure whether exposure to these low amounts of radiation is harmful to your body.

The PET and CTs that you get in this study will expose you to roughly the same amount of radiation as 42 years’ worth of background radiation. Being exposed to too much radiation can cause harmful side effects such as an increase in the risk of cancer. The risk depends on how much radiation you are exposed to. Please be aware that about 40 out of 100 people (40%) will get cancer during their lifetime, and 20 out of 100 (20%) will die from cancer. The risk of getting cancer from the radiation exposure in this study is 1.3 out of 100 (1.3%) and of getting a fatal cancer is 0.6 out of 100 (0.6%).

Patients who are breastfeeding will need to suspend breastfeeding for 12 hours after the ^{18}F-DCFPyL and ^{18}F-FDG injections, pumping and discarding the milk during that time.

Additional CT scan risks

There is a chance of developing an allergic reaction from the contrast material, which may cause symptoms ranging from mild itching or a rash to severe difficulty breathing, shock or rarely, death.

The contrast material may also cause kidney problems. The study doctors will do a blood test prior to the test to confirm that it is safe you to receive the contrast.

You may feel discomfort when the contrast material is injected. You may feel warm, flushed, get a metallic taste in your mouth or, rarely, may make you vomit or feel sick to your stomach.

MRI Risks

People are at risk for injury from the MRI magnet if they have some kinds of metal in their body. It may be unsafe for you to have an MRI scan if you have pacemakers or other implanted electrical devices, brain stimulators, some types of dental implants, aneurysm clips (metal clips on the wall of a large artery), metal prostheses (including metal pins and rods, heart valves, and cochlear implants), permanent eyeliner, tattoos, an implanted delivery pump, or shrapnel fragments. Welders and metal workers may have small metal fragments in the eye. You will be screened for these conditions before having any MRI scan. If you have a question about metal in your body, you should inform the staff. You will be asked to complete an MRI screening form before each MRI scan you have.

In addition, all magnetic objects (like watches, coins, jewelry, and credit cards) must be removed before entering the MRI scan room.

People with fear of confined spaces may become anxious during an MRI. Those with back problems may have back pain or discomfort from lying in the scanner. The noise from the scanner is loud enough to damage hearing, especially in people who already have hearing loss. Everyone having a research MRI scan will be fitted with hearing protection. If the hearing protection comes loose during the scan, you should let us know right away.

There are no known long-term risks of MRI scans.

During part of the MRI you may receive gadolinium, a contrast agent, through an intravenous (IV) catheter (small tube). It will be done for both research and medical purposes.

It is not known if MRI with contrast is completely safe for a developing fetus. Therefore, all women of childbearing potential will have a pregnancy test performed no more than 24 hours before each MRI scan with contrast. The scan will not be done if the pregnancy test is positive.

The risks of an IV catheter include bleeding, infection, or inflammation of the skin and vein with pain and swelling.

Mild symptoms from gadolinium infusion occur in fewer than 1% of those who receive it and usually go away quickly. Mild symptoms may include coldness in the arm during the injection, a metallic taste, headache, and nausea. In an extremely small number, fewer than one in 300,000 people, more severe symptoms have been reported including shortness of breath, wheezing, hives, and lowering of blood pressure. You should not receive gadolinium if you previously had an allergic reaction to it. You will be asked about such allergic reactions before gadolinium is given.

People with kidney disease are at risk for a serious reaction to gadolinium contrast called “nephrogenic systemic fibrosis (NSF)”. This condition always involves the skin and can also involve the muscles, joints and internal organs. NSF has resulted in a very small number of deaths. A blood test of your kidney function may be done within the month before an MRI scan with

gadolinium contrast. You will not receive gadolinium for a research MRI scan if your kidney function is below the safe level.

Most of the gadolinium contrast leaves the body in the urine. However, the FDA has issued a safety alert that indicates small amounts of gadolinium may remain in the body for months to years. The long-term effects of the retained gadolinium are not unknown. Some types of gadolinium contrast drugs are less likely to remain in the body than others. In this study, we will use the gadolinium contrast drugs that are less likely to remain in the body. We will also give you additional information called a "Medication Guide." Upon request, we will give you individual information about retained gadolinium we see on your studies.

Blood Draw Risks

Blood draws may cause pain, redness, bruising or infection at the site of the needle stick. Rarely some people faint. The study team member may apply numbing cream to the area so that the needle stick will not hurt as much.

Biopsy Risks

Biopsies are normally performed under the guidance of an imaging technique. Each procedure requires a separate consent prior to the biopsy. The risks may include:

- Pain and discomfort. The amount of pain and discomfort will vary, depending on the location of the biopsy site. These risks can be discussed with the study doctor.
- Minor bleeding at the biopsy site.
- Tenderness at the biopsy site.
- Scarring at the biopsy site.
- Rarely, an infection at the biopsy site.

Uncommonly, complications from biopsies can be life threatening. As with any interventional procedure, other potentially serious complications from bleeding or organ damage may occur. These might require additional surgical intervention.

The common side effects of conscious sedation include drowsiness, delayed reflexes, hypotension, headache, and nausea. These are generally mild and last no more than a few hours.

Urine Collection Risks

There are no known risks associated with urine collection.

WHAT ARE THE BENEFITS OF BEING IN THE STUDY?

You will not benefit from being in this study.

Are there any potential benefits to others that might result from the study?

In the future, other people might benefit from this study because of the knowledge that will be gained.

WHAT OTHER OPTIONS ARE THERE FOR YOU?

Before you decide whether or not to be in this study, we will discuss other options that are available to you. Instead of being in this study, you could choose to take part in a different study, if one is available. You may also receive treatment for your cancer without being in a study.

DISCUSSION OF FINDINGS

New information about the study

If we find out any new information that may affect your choice to participate in this study, we will get in touch with you to explain what we have learned. This may be information we have learned while doing this study here at the NIH or information we have learned from other scientists doing similar research in other places.

Return of research results

The results of the standard tests performed during the research will be available to you as part of your medical record.

The results of any research procedures will not be returned to you with the exception of secondary genetic findings as discussed below.

In this study, we will use a test that looks at all or most of your genes or DNA. This test may find gene changes that are not related to what is being studied in this research. These are called "secondary findings". Most of the time when we look for these, we do not find anything. If we were to look for them in 100 people, we would expect them in only about 2 to 4 of those people.

If we discover a secondary finding that might be important to you or your family's health, we plan to tell you about this. However, before we can tell you, we may need to do the test again in another laboratory to be sure that the result is correct. To do so, we may need to ask you to submit another sample for testing. Once these results are available, we will invite you to schedule a visit, in person (at our expense) or remote so that you we can give you more information about this result and to help you seek follow-up care outside of the NIH if it is needed. If you are unable to see us, we will provide a referral to a local genetic healthcare provider (at your expense). The NIH will not generally provide any further follow-up testing or care for this condition for you or your family.

We will not be testing the samples we have collected from you for several years. Because of this, just because you have not heard from us, you should not assume that you do not have any gene changes that might be important for your health.

We also do not know all the gene changes that cause can cause health problems. We could learn later that some gene changes that now we do not think cause health problems are of concern. We will look for gene changes only once and will look for those that are known to cause problems at the time we are looking. We do not plan to look again at a later time for new secondary findings.

It is up to you if you want us to tell you about any secondary findings. At any point you can tell us that you do not want to us to contact you or tell you about any secondary findings.

We can only provide these results to you. If you want us to tell anyone else, then you must provide us with a signed written release of medical information request.

It is very important for you to keep us updated on how to contact you. If we do not have up to date information, we will not be able to get in touch with you to collect an additional sample or tell you about a secondary finding. If your contact information changes, providing us with the new information is your responsibility. To tell us of your new contact information, by reaching out to your study doctor/principal investigator.

If you have questions or concerns about learning this kind of genetic information, please speak with someone from the study team.

Risks of returning secondary genetic findings

- The evaluation for unexpected gene changes is limited and may not be as complete as clinical genetic testing that might be available to you outside of the research study.
- If an unexpected gene change result is confirmed, then that test result will go into your NIH medical record. These documents are confidential, but other NIH investigators can see them.
- Learning about the changes in your genes could mean something about your family members and might cause you or your family distress. Before joining the study, it may be helpful to talk with your family members about whether they want you to share your results with them.
- If a gene change is found, it may reveal whether a particular parent passed on the change to a biological child.
- You may receive a result for an unexpected gene change that turns out not to cause that health condition. This may cause you unnecessary distress or lead to unnecessary medical testing risks and costs.

Benefits of returning secondary genetic findings

An unexpected gene change result may be useful because you may be able to do something about it to protect your health or to help you plan for your future.

Protections against misuse of genetic information

This study involves genetic testing on samples. Some genetic information can help predict future health problems of you and your family and this information might be of interest to your employers or insurers. The Genetic Information Nondiscrimination Act (GINA) is a federal law that prohibits plans and health insurers from requesting genetic information or using genetic information. It also prohibits employment discrimination based on your health information. However, GINA does not address discrimination by companies that sell life insurance, disability insurance, or long-term care insurance. GINA also does not protect you against discrimination based on an already-diagnosed condition or disease that has a genetic component.

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EARLY WITHDRAWAL FROM THE STUDY

Your doctor may decide to stop your study imaging for the following reasons:

- If your biopsy does not indicate that you have HCC
- If you become pregnant
- If he/she believes that it is in your best interest
- The imaging agent ^{18}F-DCFPyL is no longer available
- If you have side effects from the imaging agent that your doctor thinks are too severe
- You lose capacity to provide informed consent.
- If the study is stopped for any reason
- If you request to be withdrawn from the study

In this case, you will be informed of the reason imaging is being stopped.

You can stop taking part in the study at any time. However, if you decide to stop taking part in the study, we would like you to talk to the study doctor and your regular doctor first.

If you decide at any time to withdraw your consent to participate in the trial, we will not collect any additional medical information about you. However, according to FDA guidelines, information collected on you up to that point may still be provided to collaborators or designated representatives.

STORAGE, SHARING AND FUTURE RESEARCH USING YOUR SPECIMENS AND DATA

Will your specimens or data be saved for use in other research studies?

As part of this study, we are obtaining specimens and data from you. We will remove all the identifiers, such as your name, date of birth, address, or medical record number and label your specimens and data with a code so that you cannot easily be identified. However, the code will be linked through a key to information that can identify you. We plan to store and use these specimens and data for studies other than the ones described in this consent form that are going on right now, as well as studies that may be conducted in the future. These studies may provide additional information that will be helpful in understanding condition, or other diseases or conditions. This could include studies to develop other research tests, treatments, drugs, or devices, that may lead to the development of a commercial product by the NIH and/or its research or commercial partners. There are no plans to provide financial compensation to you if this happens. Also, it is unlikely that we will learn anything from these studies that may directly benefit you.

I give permission for my coded specimens and data to be stored and used for future research as described above.

_____ Yes _____ No

Initials Initials

Will your specimens or data be shared for use in other research studies?

We may share your coded specimens and data with other researchers. If we do, while we will maintain the code key, we will not share it, so the other researchers will not be able to identify

you. They may be doing research in areas that are similar to this study or in other unrelated areas. These researchers may be at NIH, other research centers and institutions, or commercial entities.

I give permission for my coded specimens and data to be shared with other researchers and used by these researchers for future research as described above.

_____ Yes _____ No

Initials Initials

If you change your mind and do not want us to store and use your specimens and data for future research, you should contact the research team member identified at the top of this document. We will do our best to comply with your request but cannot guarantee that we will always be able to destroy your specimens and data. For example, if some research with your specimens and data has already been completed, the information from that research may still be used. Also, for example, if the specimens and data have been shared already with other researchers, it might not be possible to withdraw them.

In addition to the planned use and sharing described above, we might remove all identifiers and codes from your specimens and data and use or share them with other researchers for future research at the NIH or other places. When we or the other researchers access your anonymized data, there will be no way to link the specimens or data back to you. We will not contact you to ask your permission or otherwise inform you before we do this. We might do this even if you answered "no" to the above questions. If we do this, we would not be able to remove your specimens or data to prevent their use in future research studies, even if you asked, because we will not be able to tell which are your specimens or data.

We will not anonymize (remove identifiers and de-link them from a code key) your specimens and data and use or share them with other researchers for future research at the NIH or other places.

NIH policies require that your clinical and other study data be placed in an internal NIH database that is accessible to other NIH researchers for future research. Usually, these researchers will not have access to any of your identifiers, such as your name, date of birth, address, or medical record number; and your data will be labeled with only a code. We cannot offer you a choice of whether your data to be placed in this database or not. If you do not wish to have your data placed in this database, you should not enroll in this study.

Will your genomic data be shared outside of this study?

As part of this research study, we will put your genomic data in a large database for broad sharing with the research community. These databases are commonly called data repositories. The information in this database will include but is not limited to genetic information, race and ethnicity, and sex. If your individual data are placed in one of these repositories, they will be labeled with a code and not with your name or other information that could be used to easily identify you, and only qualified researchers will be able to access them. These researchers must

receive prior approval from individuals or committees with authority to determine whether these researchers can access the data.

Summary information about all of the participants included in this study (including you*)* is being placed in a database and will be available through open access. That means that researchers and non-researchers will be able to access summary information about all the participants included in the study, or summary information combined from multiple studies, without applying for permission. The risk of anyone identifying you with this information is very low.

NIH policies require that genomic data be placed in a repository for sharing. Therefore, we cannot offer you a choice of whether your data will be shared. If you do not wish to have your data placed in a repository, you should not enroll in this study.

How long will your specimens and data be stored by the NIH?

Your specimens and data may be stored by the NIH indefinitely.

Risks of storage and sharing of specimens and data

When we store your specimens and data*,* we take precautions to protect your information from others that should not have access to it. When we share your specimens and data, we will do everything we can to protect your identity, for example, when appropriate, we remove information that can identify you. Even with the safeguards we put in place, we cannot guarantee that your identity will never become known or someone may gain unauthorized access to your information. New methods may be created in the future that could make it possible to re-identify your specimens and data.

PAYMENT

Will you receive any type of payment for taking part in this study?

You will be compensated for your participation in the study. Payment will be provided for completion of study visit 1, visit 2 and disease progression visit if applicable ($60 for each visit). Payment will also be provided for each study related imaging performed at the NIH Clinical Center ($50 for each CT, MRI, ^{18}F-FDG PET/CT and ^{18}F-DCFPYL PET/CT). Payment will be made via check or direct deposit and will be provided after each completed visits and imaging procedures.

If you are unable to finish the study, you will receive compensation for the parts you completed. If you have unpaid debt to the federal government, please be aware that some or all of your compensation may be automatically reduced to repay that debt on your behalf.

If you receive payment using a bankcard, the bank will have access to identifiable information. The bank will not have access to any medical information.

You may decline to receive compensation for participation in research and still participate in the study.

REIMBURSEMENT

Will you receive reimbursement or direct payment by NIH as part of your participation?

On this study, the NCI will reimburse the cost for some of your expenses such as those for hotel, travel, meals. Some of these costs may be paid directly by the NIH and some may be reimbursed

after you have paid. The amount and form of these payments are determined by the NCI Travel and Lodging Reimbursement Policy. You will be given a summary of the policy which provides more information.

If your travel to the NIH Clinical Center (e.g. flight, hotel) is arranged and paid for by the NIH, the agency making the reservations and their representatives will have access to your identifiable information.

COSTS

Will taking part in this research study cost you anything?

NIH does not bill health insurance companies or participants for any research or related clinical care that you receive at the NIH Clinical Center.

- If some tests and procedures are performed outside the NIH Clinical Center, you may have to pay for these costs if they are not covered by your insurance company.

CONFLICT OF INTEREST (COI)

The NIH reviews NIH staff researchers at least yearly for conflicts of interest. This process is detailed in a COI Guide. You may ask your research team for a copy of the COI Guide or for more information. Members of the research team who do not work for NIH are expected to follow these guidelines or the guidelines of their home institution, but they do not need to report their personal finances to the NIH.

No NIH investigator involved in this study receives payments or other benefits from any company whose drug, product or device is being tested.

CLINICAL TRIAL REGISTRATION AND RESULTS REPORTING

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.

CONFIDENTIALITY PROTECTIONS PROVIDED IN THIS STUDY

Some of your health information, and/or information about your specimen, from this study will be kept in a central database for research. Your name or contact information will not be put in the database. Your test results will be identified by a unique code and the list that links the code to your name will be kept separate from your sample and health information. Your information may be given out if required by law. For example, certain states require doctors to report to health boards if they find a disease like tuberculosis. However, the researchers will do their best to make sure that any information that is released will not identify you.

Will your medical information be kept private?

We will do our best to make sure that the personal information in your medical record will be kept private. However, we cannot guarantee total privacy. Organizations that may look at and/or copy your medical records for research, quality assurance, and data analysis include:

- The NIH and other government agencies, like the Food and Drug Administration (FDA), which are involved in keeping research safe for people.

- National Institutes of Health Intramural Institutional Review Board
- The study Sponsor, Center for Cancer Research or their agent(s)
- In order to receive compensation in this trial you will need to provide your social security number. If you are unable to provide your social security number, you may still participate in the study but you will not receive compensation.

The researchers conducting this study and the NIH follow applicable laws and policies to keep your identifying information private to the extent possible. However, there is always a chance that, despite our best efforts, your identity and/or information about your participation in this research may be inadvertently released or improperly accessed by unauthorized persons.

In most cases, the NIH will not release any identifiable information collected about you without your written permission. However, your information may be shared as described in the section of this document on sharing of specimens and data, and as further outlined in the following sections.

Further, the information collected for this study is protected by NIH under a Certificate of Confidentiality and the Privacy Act.

Certificate of Confidentiality

To help us protect your privacy, the NIH Intramural Program has received a Certificate of Confidentiality (Certificate). With this certificate, researchers may not release or use data or information about you except in certain circumstances.

NIH researchers must not share information that may identify you in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings, for example, if requested by a court.

The Certificate does not protect your information when it:

1. is disclosed to people connected with the research, for example, information may be used for auditing or program evaluation internally by the NIH; or
2. is required to be disclosed by Federal, State, or local laws, for example, when information must be disclosed to meet the legal requirements of the federal Food and Drug Administration (FDA);
3. is for other research;
4. is disclosed with your consent.

The Certificate does not prevent you from voluntarily releasing information about yourself or your involvement in this research.

The Certificate will not be used to prevent disclosure to state or local authorities of harm to self or others including, for example, child abuse and neglect, and by signing below you consent to those disclosures. Other permissions for release may be made by signing NIH forms, such as the Notice and Acknowledgement of Information Practices consent.

Privacy Act

The Federal Privacy Act generally protects the confidentiality of your NIH medical information that we collect under the authority of the Public Health Service Act. In some cases, the Privacy Act protections differ from the Certificate of Confidentiality. For example, sometimes the Privacy

Act allows release of information from your record without your permission, for example, if it is requested by Congress. Information may also be released for certain research purposes with due consideration and protection, to those engaged by the agency for research purposes, to certain federal and state agencies, for HIV partner notification, for infectious disease or abuse or neglect reporting, to tumor registries, for quality assessment and medical audits, or when the NIH is involved in a lawsuit. However, NIH will only release information from your medical record if it is permitted by both the Certificate of Confidentiality and the Privacy Act.

POLICY REGARDING RESEARCH-RELATED INJURIES

The NIH Clinical Center will provide short-term medical care for any injury resulting from your participation in research here. In general, no long-term medical care or financial compensation for research-related injuries will be provided by the NIH, the NIH Clinical Center, or the Federal Government. However, you have the right to pursue legal remedy if you believe that your injury justifies such action.

PROBLEMS OR QUESTIONS

If you have any problems or questions about this study, or about your rights as a research participant, or about any research-related injury, contact the Principal Investigator, Freddy Escorcia, MD, freddy.escorcia@nih.gov, 240-858-3062. You may also call the NIH Clinical Center Patient Representative at 301-496-2626, or the NIH Office of IRB Operations at 301-402-3713, if you have a research-related complaint or concern.

CONSENT DOCUMENT

Please keep a copy of this document in case you want to read it again.

Adult Research Participant: I have read the explanation about this study and have been given the opportunity to discuss it and to ask questions. I consent to participate in this study.

Signature of Research Participant	Print Name of Research Participant	Date

Investigator:

Signature of Investigator	Print Name of Investigator	Date

Witness should sign below if either:

1. **A short form consent process has been used to enroll a non-English speaking subject or**
2. **An oral presentation of the full consent has been used to enroll a blind or illiterate subject**

Signature of Witness	Print Name of Witness	Date

NIH ADMINISTRATIVE SECTION TO BE COMPLETED REGARDING THE USE OF AN INTERPRETER:

____ An interpreter, or other individual, who speaks English and the participant's preferred language facilitated the administration of informed consent and served as a witness. The investigator obtaining consent may not also serve as the witness.

____ An interpreter, or other individual, who speaks English and the participant's preferred language facilitated the administration of informed consent but did not serve as a witness. The name or ID code of the person providing interpretive support is: _____.