CONSENT FOR CANCER RESEARCH

Project Title: Evaluation of PET-MRI in initial staging of high grade rectal cancer patients and in the follow up of colorectal cancer patients.
Principal Investigator: Raj Paspulati, University Hospitals Case Medical Center, 216-844-3112
Study Coordinator: Alycia Slaton 216-286-0756
Sponsor: Philips Healthcare

Cancer research studies are coordinated by physicians and scientists from Cleveland Clinic, University Hospitals and Case Western Reserve University (CWRU) through the NIH National Cancer Institute (NCI) designated Case Comprehensive Cancer Center (Case CCC). The goal of this collaboration is to enhance cancer treatment and research in Northeast Ohio. This study is being offered at University Hospitals (UH).

1. Introduction

We are asking you to participate in a research study. The purpose of this document is to summarize your discussion with the research team and provide you with written information to help you decide whether you want to participate in research. Your decision is completely voluntary.

Your treating doctor may also be an investigator on this research study. If so, your doctor will have an interest in both your welfare and in the research study. You are not required to take part in this research study offered by your doctor. You may ask for a second opinion from another doctor who is not linked to this study. If you choose not to be in this study, the quality of your regular medical care will not be affected.

Please ask any questions you may have about the study or this consent form before signing it. Please take your time to make your decision. You will be given a copy of this form to keep.

2. Purpose

You are being approached to invite you to participate in a research study because you are scheduled to undergo an imaging examination which is called Positron Emission Tomography-Computed Tomography (PET-CT). This PET-CT combines two machines, PET and CT, to take pictures of the inside of your body. It has been requested by your doctor to understand more about the current situation of your disease, colon/rectal cancer, and/or to establish a diagnosis. He might have also requested you to have Magnetic Resonance Imaging (MRI), which will add more useful

information to the PET-CT scan. The MRI is another machine that, like the PET and the CT, can take pictures of the inside of your body.

As part of a research study, the investigators would like to test a new scanner (PET-MRI) in addition to the PET-CT scan that was requested by your doctor. This additional scan, although it won't replace your PET-CT scan, it might provide extra information regarding your disease. Also, if your doctor has requested an MRI we will be able to do it at the same time of the PET-MRI. These additional scans will be compared to the PET-CT scan you are having. The investigators hope that this new scanner that combines PET and MRI will improve the care of patients with the same disease you are being studied for.

The machine with which you will be examined is able to do both types of examination, the MRI and the PET, thus this device is called PET-MRI. The PET-MRI scanner being tested is approved for use by the U.S. Food and Drug Administration (FDA). This means that the FDA has confirmed that the two separate components of the scanner, MRI and PET, are safe and comply with the regulations that are needed to obtain diagnostic images.

PET and MRI images will be done during the same examination without repositioning and using the F18-FDG you will be injected for the PET-CT. F18-FDG is a contrast that is always used for PET and allows the machine to show us your disease in a global way to better understand how it is affecting your body.

To date, there is already experience with this scanner in adults and the first results are promising. The hope is that this scanner will show better and more completely the disease you are being studied for in one single exam, as opposed to two separate exams (PET-CT and MRI). The purpose of this research study is to find out how well this new scanner works in studying your disease.

Initially a total of 20 patients will be recruited for this study from University Hospitals Case Medical Center.

The results of the clinically requested PET-CT and, if also requested, MRI will be reported to your physician in the usual manner. The additional images obtained as part of the research, hence not clinically requested, will also be read, although they won't be reported. If any new information relevant to you or your disease is found in the research images, this data will be communicated to your doctor. Other clinical data might be recollected during your visit in case it is needed to further understand any incidental finding we might encounter. Steps will be taken to ensure that any

protected health information (PHI) acquired during your visit remains accessible only to those involved in the research protocol or in the interpretation of your exams.

3. Study Procedures

Your participation in this study will require only this one visit when you get your PET-CT scan at University Hospitals Seidman Cancer Center as part of your normal medical care.

As a preparation for the MRI examination, you may receive a small amount of clear and odorless gel into your anus (rectal gel) and the medication glucagon into a muscle (usually in the arm or leg). It will help relax your bowels during the MRI examination. If your doctor has ordered the MRI in addition to the PET/CT scan, the glucagon medication is standard of care. However, the glucagon medication is research if your doctor has ordered the PET/CT only. Our PET-MRI scanner consists of two wide upright donuts with a hole in the middle facing each other with an examination table in the middle between the two components. In order to do the PET-MRI, you will lie down on your back on the examination table. Plastic devices or grid-like devices containing small antennas will be placed on the surface of your body. Since the MRI machine will make a loud buzzy sound and noise while measuring and producing the images, you will receive some earplugs or headsets in order to protect you from the loud noise. This scanning table will then move automatically into the position inside the MRI scanner and afterwards will place you inside the PET scanner. During the PET-MRI you should stay still and not move on the scanning table as the images obtained in both scanners should be done in the same position. You will be able to communicate with the technician outside the scanner any time you want. The PET-MRI procedure will take 60-90 minutes. You will be asked to remain lying on the scanner table during this time.

After the PET-MRI scan is completed you will either go home or go have the PET-CT done, depending on the order you are getting them done. Taking the research images is exactly the same procedure as taking the diagnostic images; all you will have to do is lie down and follow commands.

For the clinically requested PET-CT you will be injected F18-FDG which is commonly called tracer. If you are requested a clinically diagnostic MRI, it might be necessary and requested by your physician to use a contrast material (Gadolinium also referred as Gd) which will enhance the information obtained with this technique. For both of these things a small plastic catheter will be placed in a vein of your arm or hand. The catheter will be placed before starting the clinically requested PET-CT or PET-MRI, depending on what scan you get first. The tracer will be injected

one hour before the PET-CT. The Gadolinium, if needed, will be injected during the MRI part leaving the catheter in place until you leave the hospital.

During this study, some of the MRI pictures taken with this machine will be done using new harmless experimental methods, and will let us compare these new images with others that are taken using the standard methods for MRI images.

MRI does not work with ionizing radiation, thus you will NOT be exposed to any radiation at all for this study, neither for the clinical diagnostic part nor for the research part of it.

4. Risks

Your participation in this study involves potential risks and discomforts. The risks associated are those posed by any PET-CT and MRI scans.

MRI uses a magnet and radio waves to make images (pictures) of the inside of the head and/or body. There have been no ill effects reported from exposure to the magnetism or radio waves used for these studies; however, it is possible that harmful effects could be recognized in the future. A known risk is that the magnet could attract certain kinds of metal that may cause injury to the patient. We will ask you about metal within or on your body; this includes certain dyes used in tattoos and body piercings. If there is any question about potentially hazardous metal within your body, you will not be able to participate in this research study. If you have a tattoo you should know that certain dyes used in the tattoo, especially ferrous based or red color dyes may cause itching or discomfort to your skin when having an MRI. We will also keep the MRI room locked so that no one carrying metal objects enters the room while you are having the scan performed. In addition, the MRI scanner makes a loud buzzing noise that could affect hearing ability. You will be provided with earplugs or headphones and assistance in their use in order to protect your hearing. You will be able to communicate with the scanner technologist using an intercom and/or signaling device. The technologist will try to help you feel as comfortable as possible in the scanner. You can ask to stop the scan and be removed from the scanner at any time by using the intercom or signaling device.

There is a very slight risk of an allergic reaction if contrast material, glucagon medication or rectal gel is administered. Such reactions usually are mild and easily controlled by medication. If you experience allergic symptoms, a radiologist or other physician will be available for immediate assistance. Nephrogenic systemic fibrosis is currently a recognized, but rare, complication of MRI believed to be caused by the injection of high doses of Gd contrast material in patients with very poor kidney function who are having dialysis. You will not be given a high dose of gadolinium for this

study and the risk of you having this complication is low. Every contrast material given will be only in the context of the diagnostic MRI and PET-CT, NOT for the research related set of images. Also keep in mind that as with all injections, bleeding, bruising, dizziness, fainting or infection may occur. Also, the injection may be painful but the discomfort should be brief and efforts will be made to minimize the pain.

Along with its needed effects, the glucagon medication may cause some unwanted effects. These side effects are not common, and most of them usually do not need medical attention and may go away within a few minutes. However, some of the side effects may need medical attention if they do occur. These side effects are: Dizziness, lightheadedness, trouble in breathing, diarrhea, irregular heartbeat, muscle cramps or pain, nausea, vomiting, weakness of arms, legs, and trunk as well as skin rash. A rise in blood sugar may occur in patients with diabetes. Your blood sugar or blood pressure may be affected for a short time if you have been diagnosed with some rare tumors of the pancreas, a gland that make insulin, or the adrenal gland, which is located close to the pancreas gland. In addition to the potential risks due to glucagon medication, the injection in your arm or leg may cause local pain and is rarely associated with bleeding beneath the injection site. After the application of the rectal gel, you may feel slight discomfort and fullness during the MRI examination. Rarely is the rectal gel associated with skin injury and bleeding from your anus.

In the event new information becomes available that may affect the risks or benefits associated with this study or your willingness to participate in it, you will be notified so that you can decide whether or not to continue participating.

Finally, there is also the potential risk of a breach of confidentiality. To diminish this risk, only people involved in this research study will have access to see the data of the study.

5. Benefits

There may be no individual and direct benefit to you for participating in this study. The potential benefit to society will be to improve future imaging diagnosis treatment and care for patients with the same type of disease you have through the use of PET-MRI.

6. Alternatives to Participation

This study does not involve treatment or a change to your clinical care. It is being done to learn how to better use techniques and technology to help people like you in the future. Because of

the nature of this research the only alternative is to not participate in this study. Then, no PET-MRI images will be obtained.

7. Costs and Compensation

The cost of the regular diagnostic clinical PET-CT and MRI exam will be billed to your health insurance for participation in this protocol, since both exams are medically requested for an existing condition which must be studied through these technologies. No extra costs will be charged for performing any other imaging method that hasn't been requested by your physician.

8. Research-Related Injury

If injury occurs as a result of your involvement in this research, medical treatment is available from University Hospitals or another medical facility but you/your medical insurance will be responsible for the cost of this treatment. A research injury is an injury that happens as a result of taking part in this research study. If you are injured by a medical treatment or procedure that you would have received even if you weren't in the study, that is not considered a "research injury". There are no plans for payment of medical expenses or other payments, including lost wages, for any research-related injury. To help avoid injury, it is very important to follow all study directions.

Further information about research-related injuries is available by contacting the Cleveland Clinic Institutional Review Board at (216) 444-2924 or University Hospitals Case Medical Center's Research Subjects Rights at (216) 983-4979.

9. Privacy and Confidentiality

You will be assigned a unique study code that will be used to link your name to data collected in this study. All data will be stored in a password-protected computer that is accessible only to study investigators.

Study information shared with persons and organizations outside of University Hospitals will not identify you except as required by law. The study code number will be used instead of personal identifiers such as your name when the images are processed or discussed among personnel involved in the study. In spite of these measures, it is not possible to guarantee that your records can always be kept confidential.

B. Authorization to Use or Disclose (Release) Health Information that Identifies You for a Research Study

If you volunteer to participate in this research, your protected health information (PHI) that identifies you will be used or disclosed to Raj Paspulati, MD and the research staff at University Hospitals for the purposes of this research and to Case Western Reserve University for administration.

The PHI that we may use or disclose (release) for this research may include your name, address, phone number, date of birth, Social Security number, information from your medical record, lab tests, or certain information relating to your health or condition..

Some of the tests and procedures done solely for this research study may also be placed in your medical record so other doctors know you are in this study. Upon completion of the study, you may have access to the research information that is contained in your medical record.

In addition to the investigators and research staff listed above, your PHI may be looked at by other groups involved with the study such as the University Hospitals Institutional Review board and the Case Comprehensive Cancer Center Protocol Review and Monitoring Committee. Your PHI may also be used by and/or disclosed (released) to:

- Study sponsor (Philips Healthcare);
- Other Institutional Review Boards or Data Safety and Monitoring Boards;
- The Food and Drug Administration;
- The Department of Health and Human Services;
- The Participants insurance company;
- The National Committee for Quality Assurance

Once your personal health information is released it may be re-disclosed and no longer protected by privacy laws.

Your research information may be used and disclosed indefinitely, but you may stop these uses and disclosures at any time by writing to:

Raj Paspulati M.D.,
UHCMC, Department of Radiology,
11100 Euclid Avenue
Cleveland OH, 44122.

Your participation in the research will stop, but any information previously recorded about you cannot be removed from the records and will continue to be used as part of this research. Also, information already disclosed outside the Cleveland Clinic cannot be retrieved. This will not affect your rights to treatment or benefits outside the research study.

University Hospitals will not use your information collected in this study for another research purpose without your written permission; unless the Institutional Review Board (IRB) and/or University Hospitals Institutional Review Board assures your privacy and confidentiality is protected. The IRB is a committee whose job it is to protect the safety and welfare of research subjects.

By signing this informed consent form, you are authorizing such access to your research and medical record information. If you choose not to sign this consent form, you will not be able to participate in this research study. This Authorization does not have an expiration date.

10. Voluntary Participation

Your participation in this research study is voluntary. Choosing not to participate will not alter your usual health care or involve any penalty or loss of benefits to which you are otherwise entitled. If you decide to join the study, you may withdraw at any time and for any reason without penalty or loss of benefits. If information generated from this study is published or presented, your identity will not be revealed.

In the event new information becomes available that may affect the risks or benefits associated with this study or your willingness to participate in it, you will be notified so that you can decide whether or not to continue participating.

11. Questions About the Research

If you have any questions, you can ask the Principal Investigator and/or research staff:

Raj Paspulati M.D.,
UHCMC, Department of Radiology,
11100 Euclid Avenue
Cleveland OH, 44122.

Emergency and After-hours Contact Information

If you are a University Hospitals patient, and you need to contact study staff outside normal business hours, you may contact _____ at (___)___-____ or (216) 844-

3951 and you will be transferred to the answering service, which can put you in contact with the oncologist (cancer doctor) on call.

If you are a Cleveland Clinic patient, you should contact the page operator at (216) 444-2200 or toll free at (800) 223-2273, and ask for the oncologist (cancer doctor) that is on call.

If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about: concerns regarding the study, research participant's rights; research-related injury; or other human subjects issues, you may contact the Institutional Review Board (IRB) at Cleveland Clinic IRB 216-444-2924 or the University Hospitals Case Medical Center's Research Subjects Rights Phone line at 216-983-4979.

Where Can I Get More Information?

You may call the National Cancer Institute's Cancer Information Services at:

1-800-4-CANCER (1-800-422-6237) or TTY: 1-800-332-8615

You may also visit the NCI website at http://cancer.gov

- For NCI's clinical trials information, go to: http://cancer.gov/clinicaltrials
- For NCI's general information about cancer, go to http://cancer.gov/cancerinfo

You will get a copy of this form. If you want more information about this study, ask your study doctor.

US National Institutes of Health (NIH) Clinical Trial Database

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.

12. Signature

Signing below indicates that you have been informed about the research study in which you voluntarily agree to participate; that you have asked any questions about the study that you may have; and that the information given to you has permitted you to make a fully informed and free decision about your participation in the study. By signing this consent form, you do not waive any

legal rights, and the investigator(s) or sponsor(s) are not relieved of any liability they may have. A copy of this consent form will be provided to you.

_____ _____

Signature of Participant ***Date***

_____

Printed Name of Participant

_____ _____

Signature of Person Obtaining Consent ***Date***

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Printed Name of Person Obtaining Consent