

INDIANA UNIVERSITY INFORMED CONSENT STATEMENT FOR

**The Role of ^{68}Ga -PSMA-11 PET in MRI Fusion Biopsy
and Surgery Guidance in Prostate Cancer**

IUSCC-0658, NCT03429244

You are invited to participate in a research study of an investigational type of PET scan, which will be compared to post-biopsy and/or post-surgical tissue analysis, to see if this scan will be helpful in detecting prostate cancer. You are being selected as a possible subject because of your diagnosis of prostate cancer. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

The study is being conducted by Clinton Bahler, M.D. of the Indiana University Department of Urology, Mark Green, Ph.D., and Temel Tirkes, M.D., of the Indiana University School of Medicine Department of Radiology and Imaging Sciences.

STUDY PURPOSE

The purpose of this study is to evaluate a radiopharmaceutical (a radioactive imaging agent) called ^{68}Ga -PSMA-11. This imaging agent seeks to identify prostate cancer based on its expression of a specific protein target, prostate-specific membrane antigen (PSMA), which is known to be present at high levels on the surface of most prostate cancer cells. The tests will involve using the radioactive agent (^{68}Ga -PSMA-11) for a pre-biopsy and/or surgical positron emission tomography (PET) scan of your pelvis to look for evidence of tumor locations. Your planned prostate cancer management is not being changed by participation in this research study. But, there is a chance that the PET scan might lead your physician to request sampling at one or two additional sites within the prostate during your scheduled biopsy, if he/she is concerned that a suspected cancer site seen on PET might otherwise be missed in a standard biopsy. The post-treatment analysis is focused on analysis of tissue that is going to be removed whether or not you choose to participate in the research.

The ^{68}Ga -PSMA-11 radiopharmaceutical is investigational, which means it has not yet been approved by the Food and Drug Administration (FDA). However, it has been used for prostate cancer imaging in hundreds of prior patient PET/CT exams, primarily in Europe.

NUMBER OF PEOPLE TAKING PART IN THE STUDY

If you agree to participate, you will be one of 36 subjects who will be participating in this research.

PROCEDURES FOR THE STUDY

If you agree to be in the study, you will do the following things:

You will be screened to ensure you meet all inclusion and exclusion criteria. Your medical history will be taken. Briefly, you must be diagnosed with prostate cancer with plan for standard of care template and fusion biopsy and/or prostate removal, or focal therapy at Indiana University.

You will receive a single intravenous injection of the ^{68}Ga -PSMA-11 radiopharmaceutical, followed by a PET/CT scan. The results of this scan will be discussed with you.

The PET scan is expected to be performed using a combined PET/MR camera. The research PET imaging will occur as you are undergoing your standard-of-care prostate MR imaging. The PET scan involves the following steps:

- a. An intravenous tube, or line, will be placed in one of your arm veins to allow for injection of the radioactive substance.
- b. You will be asked to empty your bladder. On returning to the injection room, the 68Ga-PSMA-11 radiopharmaceutical will be injected via the intravenous tube, followed by flushing of that tube with sterile saline solution.
- c. Approximately 5-minutes after the radiopharmaceutical injection you will be asked to lie down on your back on a platform on the PET/CT scanner. The scanner will collect PET images over the course of your standard of care MR imaging procedure, which will require about 45-minutes.
- d. The intravenous line will be removed, and you will be allowed to leave the imaging facility.

You will be monitored while at the imaging site to observe for any adverse events.

You may be contacted to undergo a second 68Ga-PSMA-11 PET scan approximately 6-12 months after the initial scan if you undergo high-intensity focused ultrasound and/or if you are rescheduled for MRI-fusion biopsy as standard of care during follow-up.

RISKS OF TAKING PART IN THE STUDY

While on the study, the risks are:

1. *Loss of confidentiality.* During this study, we will collect information about your medical condition and the results of the scans. To minimize the risk that your medical information might be seen by persons who are not involved in the study, our files are kept in a secure area. Also, your name will never appear in any research reports. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law (such as when the FDA asks to review our files).
2. *Radiopharmaceutical Administration and PET/MR.* The amount of this radioactive imaging agent is so small that you should not experience any drug effects whatsoever. In the very rare event this occurs (similar to an allergic reaction), our personnel are trained to quickly recognize and treat it. Signs of an allergic reaction include: rash, itching, swelling, and shortness of breath. Possible risks from placing a tube in your arm vein include bruising, and rarely, infection. To minimize the risks, all procedures will be performed by certified nuclear medicine technologist trained to perform clinical PET imaging studies using sterile (very clean) procedures.

Your participation in this research study involves exposure to radiation in addition to what you may receive as part of your standard care. The benefit from the radiation you receive for your standard care typically outweighs the risk because it allows your doctor to provide appropriate medical care; however, the additional radiation “dose” you receive for research purposes may not benefit you personally. Regulatory agencies have established annual radiation dose limits for individuals who work with radiation (e.g. x-ray technologists, radiologists, etc.). If you decide to participate in this research study, the radiation dose you receive will not be above the annual limit for radiation workers.

Radiation has been shown to cause cancer and/or leukemia from doses that are higher than the additional annual radiation dose you will receive by participating in this study. According to the Health Physics Society (an international organization that specializes in radiation protection), the increased risk of health effects from the additional annual radiation exposures in the range of those you will receive while participating in this research study is either too small to be observed or nonexistent in the normal population. While there is no evidence that any risk exists for humans exposed to this amount, it is assumed that the risks rise with lifetime accumulated dose from all sources of ionizing radiation, including the doses you receive from medical procedures and the environment. You should also be aware that everyone's sensitivity to radiation is not the same and some diseases (e.g. genetic diseases, diseases affecting DNA repair, and immune diseases such as HIV) may make you more sensitive to the effects and consequences of the radiation exposure than the normal population. Finally, you should

know that even if there is an increased risk of an effect, it could be 5 to 20 years before any effect would actually occur. Thus, you may want to factor in your age, overall health, and the number of medical radiation procedures that you've had when determining if this risk is acceptable to you. The calculated effective dose resulting from your participation in this study is available upon request.

3. Since this is an investigational study there may be risks that are unknown or unforeseeable. Your participation could be terminated by the investigators at any time if significant acute or chronic medical, neurologic, or psychiatric illness in the subject that, in the judgment of the Principal Investigator, could compromise your ability to complete the study, and/or compromise the objectives of the study.

BENEFITS OF TAKING PART IN THE STUDY

As this is an early phase study to learn how well ⁶⁸Ga-PSMA-11 images can assist in treatment planning, you are unlikely to directly benefit from being in the study. However, if we find ⁶⁸Ga-PSMA-11 scanning is better than current methods, we may be able to better detect the location, extent, and characteristics of tumor, allowing improved planning of subsequent therapy.

ALTERNATIVES TO TAKING PART IN THE STUDY

Instead of being in the study, you may choose not to participate and continue your regular cancer treatment, including the standard imaging scans. Medical care will not be withheld if you choose not to participate.

CONFIDENTIALITY

Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published and databases in which results may be stored.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the Indiana University Institutional Review Board or its designees and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP) and the Food and Drug Administration (FDA), the National Cancer Institute (NCI), who may need to access your medical and/or research records.

A description of this clinical trial will be available on ClinicalTrials.gov, as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

Use of Information for Research in the Future

Information collected from you for this study may be used for future research studies or shared with other researchers for future research. If this happens, information which could identify you will be removed before any information is shared. Since identifying information will be removed, we will not ask for your additional consent.

COSTS

You will not be responsible for any research related costs related to the PSMA-PET scan. If this exam reveals significant and unexpected abnormalities, you and/or your insurer will be responsible for any clinically indicated tests to investigate these abnormalities. MRI imaging is standard of care and will be

billed to your insurer in the same manner whether or not you choose to participate in this trial. Any treatment related costs (e.g. surgery) are not covered by this trial.

PAYMENT

You will receive no payment for participation in this research study.

COMPENSATION FOR INJURY

In the event of physical injury resulting from your participation in this research, necessary medical treatment will be provided to you and billed as part of your medical expenses. Costs not covered by your health care insurer will be your responsibility. Also, it is your responsibility to determine the extent of your health care coverage. There is no program in place for other monetary compensation for such injuries. However, you are not giving up any legal rights or benefits to which you are otherwise entitled.

CONTACTS FOR QUESTIONS OR PROBLEMS

For questions about the study or a research-related injury, contact the researcher, Dr. Bahler at 317-688-5500 (or for imaging issues, Dr. Mark Tann at (317)-944-1800). If you cannot reach the researcher during regular business hours (i.e. 8:00AM-5:00PM), please call the IU Human Subjects Office at (317) 278-3458 or (800) 696-2949. After business hours, please call (317)-944-5000 and ask for the radiology resident on call for imaging-related issues. For questions about your rights as a research participant, to discuss problems, complaints, or concerns about a research study, or to obtain information or offer input, contact the IU Human Subjects Office at 800-696-2949 or irb@iu.edu.

VOLUNTARY NATURE OF STUDY

Taking part in this study is voluntary. You may choose not to take part, or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect your current or future relations with Indiana University Health or the Departments of Urology or Radiology and Imaging Sciences, Indiana University School of Medicine.

If you want to stop being in the study, tell the study doctor or study staff. If you decide to stop being in the study, the study doctor or study staff may ask you some questions about when you were in the study. If you, or your study doctor, decide to stop your participation from the study you may be asked to return for follow-up visits to help monitor your health and condition.

During the course of the study, if we receive any important new information about the study, that might change your mind about continuing in the study, the study doctor or study staff will tell you about it. You are free to withdraw your consent from the study at any time. Your participation could be terminated by the investigators at any time if significant acute or chronic medical, neurologic, or psychiatric illness in you that, in the judgment of the Principal Investigator, could compromise your safety, limit your ability to complete the study, and/or compromise the objectives of the study.

SUBJECT'S CONSENT

In consideration of all of the above, I give my consent to participate in this research study. I will be given a copy of this informed consent document to keep for my records. I agree to take part in this study.

Subject's Signature: _____ **Date:** _____
(must be dated by the subject)

Subject's Printed Name: _____

Signature of Person Obtaining Consent: _____ **Date:** _____

Printed Name of Person Obtaining Consent: _____