Participant Informed Consent for Clinical Research

Study title for participants: Testing a New Imaging Agent to Identify Cancer

Official study title for internet search on http://www.ClinicalTrials.gov:
Imaging of HER2-expressing Cancer with Site-Specifically Labeled ^{89}Zr-ss-Pertuzumab

Lead Researcher: Somali Gavane, MBBS (212-639-2403)

Overview and Key Information

Why is this study being done?

We are asking you to take part in a clinical research study. We do research studies to try to answer questions about how to prevent, diagnose, and treat diseases like cancer.

You are being asked to take part in this research study because you have human epidermal growth factor receptor 2-positive (HER2+) cancer or HER2-low tumors. HER2+ means that your cancer contains HER2, a protein that controls cell growth. HER2-low means that your tumor cells contain lower levels of the HER2 protein on their surface.

The researchers think using an imaging agent called ^{89}Zr-ss-pertuzumab with positron emission tomography/computed tomography (PET/CT) scans may be an effective method for imaging HER2+ cancer and HER2-low tumors. ^{89}Zr-ss-pertuzumab is a radioactive imaging agent that is given through a vein, and it gives off a small amount of radioactivity as it travels throughout your body. The radioactivity builds up in locations where your disease is, and it can help PET/CT scans take pictures of your cancer. The researchers think that ^{89}Zr-ss-pertuzumab may help identify HER2+ and HER2-low tumors because it specifically binds to the HER2 protein.

We are doing this study to see whether ^{89}Zr-ss-pertuzumab is safe in people with HER2+ and HER2-low cancer and whether it will be able to predict the response of your cancer to HER2-targeted drugs.

^{89}Zr-ss-pertuzumab is developed from the drug pertuzumab. The US Food and Drug Administration (FDA) has approved pertuzumab for the treatment of breast cancer that has spread to other parts of the body (metastatic). The FDA has not approved ^{89}Zr-ss-pertuzumab as imaging agents for people with HER2+ and HER2-low cancer; their use in this study is considered investigational. This study is the first time that ^{89}Zr-ss-pertuzumab is being tested in people.

Taking part in this study is your choice.

You can choose to take part or not to take part in this study, and you can change your mind at any time. Whatever choice you make, you will not lose access to your medical care or give up any legal rights or benefits.

This document presents important information to help you make your choice. Please take time to read it carefully. Talk with your doctor, family, or friends about the risks and benefits of taking part in this study. It's important that you have as much information as you need, and that all your questions are answered.

What is the usual approach to imaging my HER2+ cancer?

People who are not in a study usually have their cancer monitored with computed tomography (CT), magnetic resonance imaging (MRI), and/or positron emission tomography (PET) scans. These scans take pictures of your cancer.

What are my other choices if I decide not to take part in this study?

- You may choose to have the usual approach described above
- You may choose to take part in a different research study, if one is available

What will happen if I decide to take part in this study?

If you decide to take part in this study, you will receive ^{89}Zr-ss-pertuzumab and have 1 PET/CT scan about 1 week after ^{89}Zr-ss-pertuzumab injection.

The study doctor or your treating doctor may determine that additional ^{89}Zr-ss-pertuzumab PET/CT scans would be of benefit to you. After you finish the PET/CT scans, your participation in the study will end.

What are the risks and benefits of taking part in this study?

There are both risks and benefits to taking part in this study. It is important to think carefully about these as you make your decision.

Risks

We want to make sure that you know about a few key risks right now. We will also give you more information in the *What risks can I expect from taking part in this study?* section of this consent form.

There is a risk that you could have side effects from the ^{89}Zr-ss-pertuzumab. These side effects may be worse, and they may be different than you would have with the usual approach for taking pictures of your cancer.

Since researchers have not tested ^{89}Zr-ss-pertuzumab in people before, they do not know all the side effects the imaging agent could cause. However, researchers think ^{89}Zr-ss-pertuzumab will cause the same side effects as ^{89}Zr-pertuzumab, a similar research PET tracer that has been studied before at Memorial Sloan Kettering Cancer Center.
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Some of the possible side effects of ^{89}Zr-pertuzumab that the study doctors know about are:

- Fever
- Chills
- Feeling tired
- Skin rashes
- Hives
- Allergic reaction/hypersensitivity. Allergic reactions may be mild (such as skin rash or hives) to severe (such as breathing difficulties or shock).

There may be some risks that the study doctors do not yet know about.

Benefits
This study does not provide treatment. However, the extent and location of tumors may be better assessed by these research imaging agents than by standard-of-care imaging. What we learn from the study may help other people in the future.

If I decide to take part in this study, can I stop later?
Yes, you can decide to stop participating in the study at any time.

The study doctor will tell you about new information or changes in the study that may affect your health or your willingness to continue in the study.

If you decide to stop, let the study doctor know as soon as possible. It's important that you stop safely.

If you stop, you can decide whether to let the study doctor or a member of the study team continue to contact you to ask questions about your health. We will not be able to withdraw information about you that has been used or shared with others before you informed us of your decision to stop.

Are there other reasons why I might stop being in the study?
Yes. The study doctor may take you off the study if:

- Your health changes, and the study is no longer in your best interest
- New information becomes available, and the study is no longer in your best interest
- You do not follow the study rules
- For women who are able to have children: You become pregnant while you are in the study
- The study is stopped by the National Cancer Institute (NCI), Institutional Review Board (IRB), Food and Drug Administration (FDA), or the study sponsor, Memorial Sloan Kettering Cancer Center (MSK). The study sponsor is the organization that oversees the study.

It is important that you understand the information in this informed consent document before you make a decision about participating in this clinical trial. Please read, or have someone read to you, the rest of this document. If there is anything that you don't understand, ask the study doctor or nurse for more information.

What is the purpose of this study?
This study will test whether the imaging agent ^{89}Zr-ss-pertuzumab is safe and useful for identifying HER2+ or HER2-low tumors with PET/CT scans. In addition, the researchers will find out how much radiation the body is exposed to when ^{89}Zr-ss-pertuzumab is used.

^{89}Zr-ss-pertuzumab is a radiolabeled antibody. Radiolabeled antibodies are proteins that have small radioactive particles attached to them that allow them to be detected during imaging. ^{89}Zr-ss-pertuzumab bind to HER2 proteins on tumor cells, so the PET/CT scans can specifically take pictures of HER2+ or HER2-low tumors.

The FDA has not approved ^{89}Zr-ss-pertuzumab as imaging agents for people with metastatic HER2+ or HER2-low cancer; their use in this study is considered investigational. This study is the first time that ^{89}Zr-ss-pertuzumab is being tested in people.

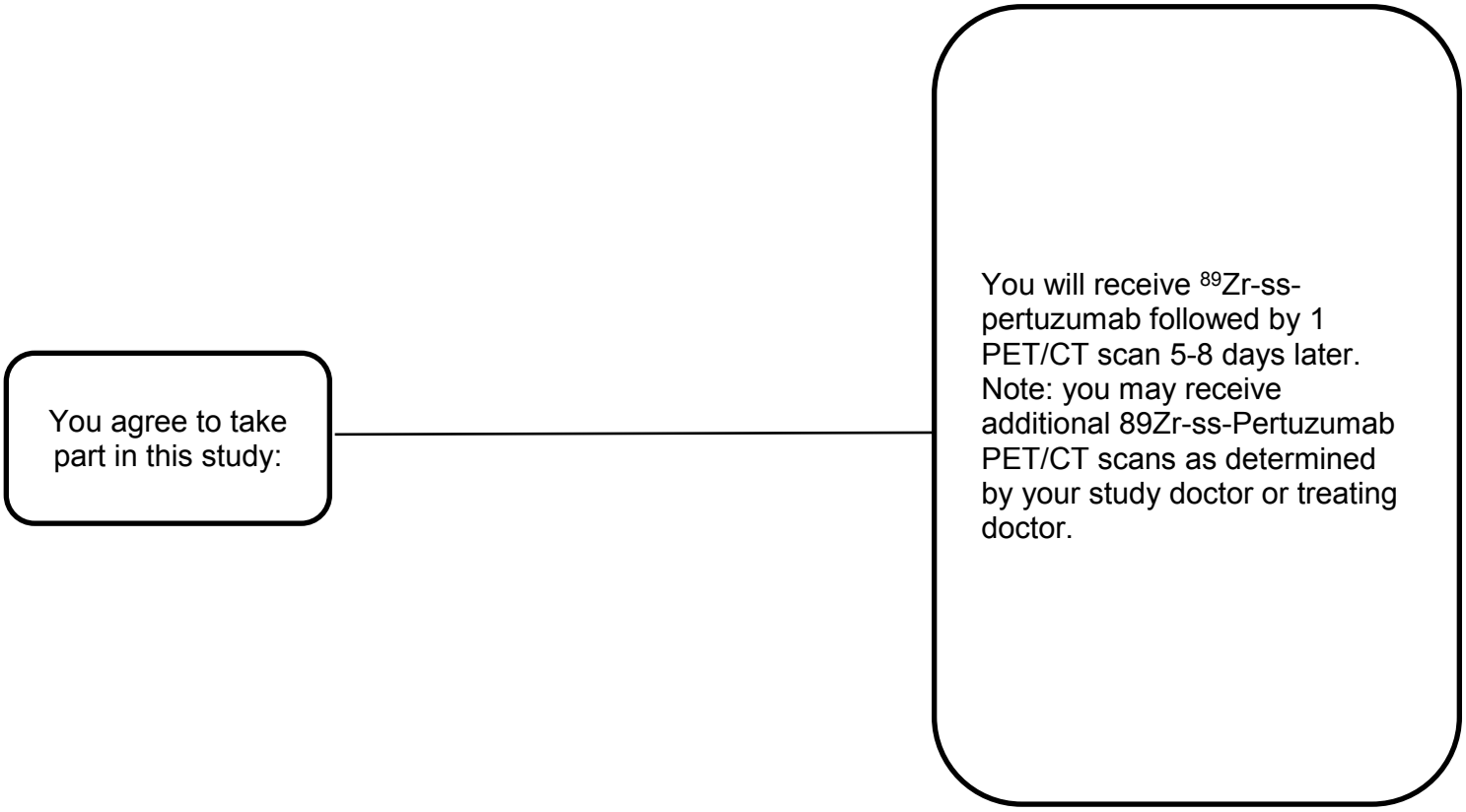
The ^{89}Zr-ss-pertuzumab will be provided by Memorial Sloan Kettering Cancer Center (MSK).

About 60 people will take part in this study at MSK.

What are the study groups?

There is only one study group in this study.

Another way to find out what will happen to you during this study is to read the chart below. Start reading at the left side and read across to the right, following the lines and arrows.



What extra tests and procedures will I have if I take part in this study?

Before you begin the main part of the study:

The study doctor will review your medical records and the results of your exams, tests, and procedures to see if it is safe for you to take part in the study. This first part of the study is called screening. Most of the screening exams, tests, and procedures are part of the usual care that you would have if you were not in a study.

The tests and procedures that will be done only for research purposes, or that may be done more often because you are participating in this study, are listed below.

- Pregnancy test, in female study participants who can become pregnant

During the study:

You will receive ^{89}Zr-ss-pertuzumab by intravenous (IV) infusion through a needle placed in your vein. The infusion will last about 5 minutes.

You will return in 5-8 days for a PET/CT. The PET/CT scan will take about 1 hour.

Exams, Tests, and/or Procedures
You will have tests and procedures during the main part of the study. The tests and procedures that will be done only for research purposes, or that may be done more often because you are participating in this study, are listed below.

- Vital sign measurements before and 15-30 minutes after you receive ^{89}Zr-ss-pertuzumab
- Additional 89Zrss-Pertuzumab PET/CT scans determined by your study doctor or treating doctor

After you have completed the PET/CT scans, your participation in the study will end.

A Study Calendar that shows how often you will have these exams, tests, and procedures is provided at the end of this consent form. The calendar also includes exams, tests, and procedures that are part of your usual care.

Will I receive the results of my research tests?
You will not receive the results of any tests done for research purposes during this study.

What risks can I expect from taking part in this study?
If you choose to take part in this study, there is a risk that:

- You may lose time at work, school, or at home, and you may spend more time than usual in the hospital or doctor's office
- You may be asked sensitive or private questions that you do not usually discuss

The imaging agents used in this study may affect how different parts of your body work, such as your liver, kidneys, heart, and blood.

There is also a risk that you could have side effects from the imaging agents/study approach.

Important information about side effects:

- The study doctors do not know who will or will not have side effects.
- Some side effects may go away soon, some may last a long time, and some may never go away.
- Some side effects may make it difficult for you to have children.
- Some side effects may be mild. Others may be very serious, and may even result in death.

Important information about how you and the study doctor can make side effects less of a problem for you:

- If you notice or feel anything different, tell the study doctor. He or she can check to see if you are having a side effect.
- The study doctor may be able to treat some side effects.

The section below shows the most common and the most serious side effects that researchers know about. There may be other side effects that the doctors do not yet know about. If important new side effects are found during this study, the study doctor will discuss them with you.

Possible side effects of ^{89}Zr-ss-pertuzumab:
Since researchers have tested ^{89}Zr-ss-pertuzumab in a small number of people before, they do not know all the side effects the imaging agent could cause. However, researchers think ^{89}Zr-ss-pertuzumab will cause the same side effects as ^{89}Zr-pertuzumab. When 50 people received ^{89}Zr-pertuzumab and a similar agent, no side effects were seen.

When you receive ^{89}Zr-ss-pertuzumab in this study, you could have none or some of the side effects listed below:

- Fever
- Chills
- Feeling tired
- Skin rash
- Hives
- Allergic reaction/hypersensitivity. Allergic reactions may be mild (such as skin rash or hives) to severe (such as breathing difficulties or shock).

The amount of the imaging agents given in this study is very small, and side effects are expected to be rare.

Possible risks of radiation-based diagnostic imaging: You will be exposed to low amounts of radiation from the imaging procedures performed during this study. The PET/CT scans provide detailed pictures of the inside of the body, like an MRI (magnetic resonance imaging) scan, but using radiation, like an X-ray. Every day, people are exposed to low levels of radiation that comes from the sun and the environment. Scientists think that exposure to too much radiation can be harmful.

The amounts of radiation associated with the scan(s) included in this study are comparable to those from standard-of-care imaging procedures. Each year, many thousands of patients routinely undergo similar diagnostic procedures and receive comparable radiation doses with no short- or long-term adverse effects.

Reproductive risks: You should not get pregnant, breastfeed, father a baby, or donate sperm while you are in this study. The imaging agents used in this study could be very damaging to an unborn baby.

Check with the study doctor about what types of birth control or pregnancy prevention to use while you are in this study. You must continue to use these methods for 1 month after completing the study intervention.

Let the study doctor know about any questions you may have about possible side effects. You can ask the study doctor questions about side effects at any time.

What are my responsibilities in this study?

If you choose to take part in this study, you will need to:

- Keep your study appointments
- Tell the study doctor about:
  - All medications and any supplements you are taking
  - Any side effects from these medications or supplements
  - Any doctor visits or hospital stays outside of this study
  - Whether you have been or are currently in another research study

Is there a conflict of interest for this study?

This study is sponsored by Memorial Sloan Kettering Cancer Center and funded by the National Institutes of Health (NIH). There are no known investigator and/or institutional conflicts of interest in this study.

What are the costs of taking part in this study?

You will not have to pay for the ^{89}Zr-ss-pertuzumab or for tests and procedures done only for research purposes, including:

- 89Zr-ss-Pertuzumab PET/CT scan(s) throughout the study

You and/or your health plan/insurance company will have to pay for all the other costs of treating your cancer while you are in this study. These charges include the costs of insurance co-pays and deductibles, as well as tests, procedures, or drugs that you get during the study to monitor your safety, and to prevent or manage any side effects.

Talk to your insurance provider and make sure that you understand what your insurance pays for and what it does not pay for if you take part in this clinical trial. Also find out if you need approval from your health plan before you can take part in this study.

The study doctor or nurse can help you find the right person to talk to if you are not sure which costs will be billed to you or your insurance provider.

Will I receive payment for taking part in this study?

You will not be paid for taking part in this study.

What happens if I am injured or hurt because I took part in this study?

You will get medical treatment if you are injured as a result of taking part in this study.

If you think that you have been injured as a result of taking part in this research study, tell the study doctor or the person in charge of the study as soon as possible. The name and telephone number of the person in charge of this research are listed on the first page of this consent form.

We will offer you treatment for research injuries that happen as a result of your taking part in this study. You and/or your health plan will be charged for this treatment. Medical services will be offered at the usual charge. You will be responsible for any costs not covered by your health plan/insurance company.

If you think that your injury was a result of medical error, you keep all your legal rights to receive payment for treating the injury, even though you are in a study.

Who will see my medical information?

Your privacy is very important to us, and the researchers will make every effort to protect it. Trained staff at Memorial Hospital may review your records, if necessary.

Access to your protected health information will be limited to those listed in the Research Authorization form, which is a part of the informed consent process.

Your information may be given out, if required by law. For example, some states require doctors to make a report to the state health board if they find that a participant in a research study has a contagious disease like tuberculosis. However, the researchers will do their best to make sure that any information about you that may be released will not identify you.

In the future, your information (data) and biospecimens may be de-identified, which means that your data and/or biospecimens will be assigned a unique code, and the list that links the code to your name will be stored separately from your biospecimens and data. Your de-identified information and biospecimens may be used for research that has not been described in this consent form, and they may be shared with another investigator for future research. You will not be asked if you agree to take part in future research studies.

If your information from this study is used in any reports or publications, your name and anything else that could identify you will not be used. It is possible that your de-identified information from this study will be shared with other researchers outside of MSK, and may be stored in public databases related to research. All requests for data sharing will be reviewed by the study sponsor, and if individual results are included in the data, they will not contain any identifiable information about you, such as your name, address, telephone number, or social security number. Your privacy is very important to us and we use many safety procedures to protect your privacy. However, we cannot guarantee that no one will ever be able to use your information to identify you.

The study doctors have a Certificate of Confidentiality from the National Institutes of Health for this study. This gives MSK an additional way to protect sensitive information that identifies you in your records if it is requested as part of a legal proceeding. However, MSK may still be required to share some of your medical information if required by law.

Where can I get more information?

You may visit the NCI web site at http://cancer.gov/ for more information about research studies, or for general information about cancer. You may also call the NCI Cancer Information Service to get the same information at 1-800-4-CANCER (1-800-422-6237).

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.

You can talk to the study doctor about any questions or concerns that you may have about this study, or to report side effects or injuries. You may also contact the lead researcher listed on the first page of this consent.

For questions about your rights while you are participating in this study, call the MSK Institutional Review Board (IRB) at 212-639-7592. If you have concerns, complaints, or input on research, or if you would like more information about the informed consent process, please contact the MSK Patient Representative Department at 212-639-7202.

Research Authorization for the Use and Disclosure of Protected Health Information (PHI)

Testing a New Imaging Agent to Identify Cancer

Federal law requires Memorial Sloan Kettering Cancer Center (MSK) to protect the privacy of information that identifies you and relates to your past, present, and future medical conditions (protected health information; PHI). We are committed to protecting the privacy of your information.

If you enroll in this research study, your protected health information will be used and shared with others, as explained below. MSK must obtain your permission before using or sharing your protected health information for research purposes. This form helps to make sure that you are informed of the ways in which your information will be used or shared in the future.

Carefully read the information below before you sign this form. By signing this form, you agree to the use and disclosure of your information for this research study.

1. What protected health information about me will be used or shared with others during this research?

- Your medical records
- Your research records, including new health information created from study-related tests, procedures, visits, and/or questionnaires
- Any health information or clinical data associated with your biospecimens, if the information or data could be reasonably used to identify you. This information or data will be shared only if you have agreed to it by signing this informed consent document.
- HIV-related information, including any information indicating that you have had an HIV-related test; or that you have HIV infection, HIV-related illness, or AIDS; or any information that could indicate that you may have been exposed to HIV. (New York State requires us to obtain your consent to use or share this information.)

2. Who will use or share my protected health information?

MSK will use and share your protected health information. People and offices that deal with research oversight, quality assurance, and/or billing will be able to use and share your protected health information, including:

- The study's Principal Investigator and Co-Principal Investigator: Somali Gavane, MBBS and Jason Lewis, PhD
- Your research team at MSK, including the participating investigators, research staff, research nurses, fellows/residents, and clerical support staff
- Any healthcare personnel who provide services to you in connection with this study
- Members and staff of MSK's Institutional Review Board (IRB) and Privacy Board (PB)
- Staff of MSK's Clinical Research Administration, which oversees clinical studies, and Clinical Research Information Technology Group, which manages research databases
- Members of MSK's Data Safety Monitoring Board/Committee and the Quality Assurance Committee

3. With whom outside of MSK may my protected health information be shared?

Although all reasonable efforts will be made to maintain the confidentiality of your protected health information, it may be shared with and used by the following:

- The company or organization that provides the funding for the study, National Institutes of Health (NIH).
- MSK's research collaborators, business partners, subcontractors and agent(s), in the United States or in other countries, working to conduct the study, to monitor the study, or to analyze the study information for this study or for other research about the study intervention.
- Other research doctors and medical centers participating in this research.
- Federal and state agencies, and other domestic or foreign government bodies, if required by law and/or necessary for oversight purposes, including:
    - Office for Human Research Protections (OHRP) of the US Department of Health and Human Services (HHS)
    - US Food and Drug Administration (FDA) and other regulatory agencies responsible for oversight of research
    - National Cancer Institute (NCI)/National Institutes of Health (NIH)
- Other qualified researchers, approved by MSK, who may receive individual research results that do not identify you.
- Other: Members of the research teams at participating sites

Some of the organizations that may receive your protected health information may not have to satisfy the privacy rules and requirements; they may share your information with others without your permission.

4. Why will my protected health information be used by or shared by MSK or others?

The main reasons for the use or sharing of your information include the following:

- To conduct the study, to monitor your health status, to measure the effects of the drug(s)/device(s)/procedure(s) being studied, and to determine the research results
- To ensure that the research meets legal and institutional requirements
- To develop new tests, procedures, and commercial products
- To enhance research databases, so that scientists can design better research studies to develop new therapies for patients and to gain a better understanding of disease
- To assist with MSK medical treatment, billing, or healthcare operations. For example, medical information produced by this research study will become part of your hospital medical record.

5. For how long will my protected health information be used or shared with others?

There is no set date at which your protected health information that is being used or shared for this research study will be destroyed or no longer used. The information used and created during the study may be analyzed for many years, and it is not possible to know when this analysis will be completed.

6. Statement of privacy rights:

- It is your right to refuse to sign this authorization form. If you do not sign this form, you will not be able to participate in this research study. However, if you do not sign, it will not affect your ongoing medical treatment or healthcare coverage.

- You have the right to withdraw your permission for MSK to use or share your protected health information. Please note that we will not be able to withdraw all the information about you that already has been used or shared with others to carry out research-related activities such as oversight, or information that is needed to ensure the quality of the study. To withdraw your permission, write to the study doctor listed on the first page of this consent form at: Memorial Sloan Kettering Cancer Center, 1275 York Avenue, New York, NY 10065. If you withdraw permission for us to use or share your protected health information, you will not be able to continue to participate in this research study.

- You have the right to request access to your protected health information that is being used or shared during this research and that is related to the research or to payment for the research. However, you may access this information only after the study is completed. You may have access to the parts of your medical record that are unrelated to this study at any time. To request this information, please contact the study doctor whose name and telephone number are listed on the first page of this consent form. You may also ask the study doctor to correct any study-related information about you that is wrong.

Notice concerning HIV-related information

Individuals/organizations are prohibited from sharing any HIV-related information about you without your approval, unless they are permitted to do so under federal or state law. You have a right to request the list of people who may receive or use your HIV-related information without your authorization.

If you experience discrimination because of the release or disclosure of your HIV-related information, you may contact the New York State Division of Human Rights at 888-392-3644 or the New York City Commission on Human Rights at 212-306-7500. These agencies are responsible for protecting your rights.

Participant Informed Consent/Research Authorization for Clinical Research

Statement of professional obtaining consent
I have fully explained this clinical research study to the participant. In my judgment, and in that of the participant, sufficient information, including risks and benefits, was provided for the participant to make an informed decision. The consent discussion will be documented in the participant's EMR.

Consenting professional must personally sign and date		
Consenting professional's signature		**Date:**
Consenting professional's name (Print)		

Participant's statement
I have read this form that describes the clinical research study. I have also talked it over to my satisfaction with the consenting professional. By signing below, I agree to the following: (1) to voluntarily participate in this clinical research study; (2) to authorize the use and disclosure of my protected health information (data about myself); and (3) to state that I have received a signed and dated copy of this consent form.

Participant must personally sign and date		
Participant signature		**Date:**
Participant name (Print)		

Witness signature (if required)

- ❑ Witness for non-English speaking participant: I declare that I am fluent in both English and in the participant's language, and I confirm that the consent discussion was appropriately interpreted for the participant.
- ❑ Other: I confirm that the consent discussion occurred, and that the participant agreed to participate in this study by signing this form, making his/her mark, or verbally agreeing.

Name of witness: _____

Signature of witness: _____ **Date:** _____
(The name of the witness must be documented in the EMR.)

Interpreter (if required)
Name of interpreter (if present): _____
ID number (if phone interpreter): _____
(The interpreter's name or ID number must be documented in the EMR.)

The participant must be provided with a **signed copy** of this form

Study Calendar:

This calendar shows the exams, tests, and procedures that will be done as part of this research study, as well as the tests and procedures that are part of your usual care. The shaded boxes show which tests and procedures you will not have to pay for as part of your participation in this study. You and/or your health plan/insurance company will be billed for the tests and procedures that appear in the unshaded boxes.

Exam/Test/Procedure	Screening	Visit 1	Visit 2*	Follow-up
	Within 60 days before Visit 1	Day 1	5-8 days after Day 1	
Physical exam, vital signs	X	X[1]		
Pregnancy test, if applicable	X			
Standard blood tests	X			
• CMP				
CT or MRI scans, FDG PET/CT	X			
89Zr-ss-Pertuzumab administration		X		
89Zr-ss-Pertuzumab PET/CT scan			X	

*Note: Your study doctor or treating doctor may determine that an additional ss-Pertuzumab PET/CT scan may be of benefit to you.
[1]Only vital signs will be collected at Visit 1 Day 1.