MC1831 / 18-000734

Therapeutic Targeting of ER Beta in Triple Negative Breast Cancer

NCT03941730

Document Date: 02/28/2024

MAYO CLINIC

Name and Clinic Number
Protocol #: MC1831 **Version #: Main Study – MCCC Amdt 4** **Version Date: 21Nov2022**

Approval Date: February 28, 2024
Not to be used after: February 27, 2025

RESEARCH PARTICIPANT CONSENT AND PRIVACY AUTHORIZATION FORM

Study Title: MC1831 - Therapeutic targeting of ER beta in triple negative breast cancer (TBCRC051) – MAIN STUDY

IRB#: 18-000734

Principal Investigator: Matthew P. Goetz, M.D., and Colleagues

Key Study Information

This section provides a brief summary of the study. It is important for you to understand why the research is being done and what it will involve before you decide. **Please take the time to read the entire consent form carefully and talk to a member of the research team before making your decision.** You should not sign this form if you have any questions that have not been answered.	
It's Your Choice	This is a research study. Being in this research study is your choice; you do not have to participate. If you decide to join, you can still stop at any time. You should only participate if you want to do so. You will not lose any services, benefits or rights you would normally have if you choose not to take part.
Research Purpose	The purpose of this research is to find out more about the anti-cancer effects of estradiol in women with TNBC that expresses estrogen receptor beta (β). Estradiol is not FDA approved for the treatment of triple negative breast cancer. You have been asked to take to take part in this research because you have been diagnosed with triple negative breast cancer (TNBC) that has progressed after prior treatment.
What's Involved	Study participation involves the following (which are part of regular care for your cancer): • Clinical biopsy prior to treatment to confirm whether your current tumors are triple negative breast cancer (TNBC) and, if so, sending a sample to see whether your tumors also test positive for ERβ

	NOTE: If you have had a clinical biopsy in the past year and there is sufficient tissue available for testing for this study, you may not need another biopsy. • Medical history and physical exam including vital signs • Imaging of your tumors • Routine blood tests • Taking an oral drug, estradiol, three times per day, every day The study also requires the following tests which are done only for research: • Additional blood collected for research at the same time as blood drawn for your regular care • A tumor biopsy after one cycle of taking estradiol to see if the estradiol is working You will take estradiol until your cancer gets worse or you have side effects that you cannot tolerate. If the drug works for your cancer, you will be able to take it as long as it is effective.
Key Information	Currently there are few effective treatments for women with TNBC whose cancer has grown despite standard chemotherapy. You don't have to be in this study to receive treatment for your condition. Your other choices include other chemotherapy, other clinical trials or no treatment for your disease. Patients who enroll on this study may be foregoing treatment options that confer clinical benefit. Before enrolling onto this study, you should discuss with your doctor each of the above options. The biggest risks to consider are the risks of the study drug (estradiol) and the risks of the biopsies. The side effects of estradiol are well known, and these side effects may be mild (nausea) or life rarely life threatening (blood clots or a stroke). Though the risks from biopsies are low, there is still a risk of infection, bleeding, and both of these risks could be life threatening. It is important to note that there is no guarantee that the drug estradiol will have a beneficial effect on your cancer. The study involves about the same amount of time or less time than regular care for your cancer.

Learn More	If you are interested in learning more about this study, read the rest of this form carefully. The information in this form will help you decide if you want to participate in this research or not. A member of our research team will talk with you about taking part in this study before you sign this form. If you have questions at any time, please ask us.

Making Your Decision

Taking part in research is your decision. Take your time to decide. Feel free to discuss the study with your family, friends, and healthcare provider before you make your decision. Taking part in this study is completely voluntary and you do not have to participate.

If you decide to take part in this research study, you will sign this consent form to show that you want to take part. We will give you either a printed or electronic copy of this form to keep. A copy of this form will be put in your medical record.

Contact Information

If you have questions about …	You can contact …
• Study tests and procedures • Materials you receive • Research-related appointments • Research-related concern or complaint • Research-related injuries or emergencies • Withdrawing from the research study	**Principal Investigators:** Matthew P. Goetz, M.D. (MN) Rohit R. Rao, M.D. (FL) **Phone:** MN: (507) 284-2511 FL: (904) 953-2000 **Institution Names and Addresses:** Mayo Clinic 200 First St SW Rochester MN 55905 Mayo Clinic 4500 San Pablo Road Jacksonville, FL 32224
• Rights of a research participant	**Mayo Clinic Institutional Review Board (IRB)** **Phone:** (507) 266-4000 **Toll-Free:** (866) 273-4681
• Rights of a research participant • Any research-related concern or complaint • Use of your Protected Health Information • Privacy concerns related to data collected in the European Economic Area. • Stopping your authorization to use your Protected Health Information • Withdrawing from the research study	**Research Participant Advocate (RPA)** **(The RPA is independent of the Study Team)** **Phone:** (507) 266-9372 **Toll-Free:** (866) 273-4681 **E-mail:** researchparticipantadvocate@mayo.edu
• Billing or insurance related to this research study	**Patient Account Services** **Toll Free:** (844) 217-9591

Other Information:
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.

A description of this research study will be available on clinicaltrials.mayo.edu. This Web site will not include information that can identify you. You can search this Web site at any time.

Why are you being asked to take part in this research study?

You are being asked to take part in this study because you have been diagnosed with triple negative breast cancer (TNBC) that has progressed after prior treatment. TNBC is negative for estrogen-receptor alpha (ERα), progesterone receptor (PR), and HER2.

About 38 people will take part in this research study across the country. The plan is to have about 30 people take part in this study at Mayo Clinic.

Why is this research study being done?

The purpose of the MC1831 study is to use estradiol in women whose tumors are ERβ positive but are negative for ERα.

This study is being done to find out more about the anti-cancer effects of estradiol in women with TNBC that expresses estrogen receptor beta (ERβ or ER beta). Everyone in this study who has TNBC that expresses estrogen receptor beta will receive estradiol. Estradiol is indicated for the treatment of breast cancer (for palliation only) in appropriately selected women and men with metastatic disease. However the role of estradiol in the treatment of metastatic TNBC that expresses ER beta is unknown.

There may be additional chemotherapy drugs available for treatment of your cancer that may provide clinical benefit. Before enrolling in this study, you should discuss all other options with your doctor before making a decision.

ERβ is a unique hormone receptor that is different than estrogen receptor alpha (ERα). Hormone receptors allow the body to respond appropriately to hormones. In some people with TNBC breast cancer, ERβ is overexpressed. Cancer cells that overexpress ERβ grow slower in the laboratory and this growth is slowed in the presence of estrogen. This process is different than cancers that express estrogen receptor alpha (ERα). In these cancers, estrogen can cause growth of cancer cells that express ERα. This study is testing whether breast cancer cells that do not express ERα but do overexpress ERβ will shrink in the presence of estradiol. Whether or not ERβ is overexpressed may make a difference in how people respond to estradiol.

Information you should know

Who is Funding the Study?
The Mayo Clinic Cancer Center, the Mayo Clinic Breast Cancer Special Project of Research Excellence (SPORE), and Johns Hopkins University on behalf of the Translational Breast Cancer Research Foundation are providing funding for this trial. Some funding is provided by a generous benefactor.

Administrative support for this study is being provided by Johns Hopkins University on behalf of the Translational Breast Cancer Research Foundation (TBCRC). The TBCRC is a group of academic medical centers across the United States that work together to conduct breast cancer research.

How long will you be in this research study?

You will receive treatment in this study as long as your cancer does not get worse and you are not having bothersome side effects. After you stop treatment, we will follow your health for up to 5 years after you start this study.

What will happen to you while you are in this research study?

Before you start this study, you will sign this informed consent form.

Pre-Registration

All patients will need to have the following exams, tests or procedures to find out if you can be in the study:

- Biopsy of breast cancer or submission of tissue from a biopsy done in the past year. If there is not enough tissue from the previous biopsy, then a new biopsy will be required.

These exams, tests or procedures are part of regular clinical care and may be done even if you do not join the study. If you have had some of them recently, they may not need to be repeated. This will be up to the Principal Investigator.

This biopsy will be used by your doctor to confirm triple negative breast cancer, and to provide tissue samples to Mayo Clinic for ERβ and research testing.

If your tumor is confirmed to be triple negative, you will have the following tests and procedures to determine whether you are eligible to take part in this study:

- Medical history and physical exam including measurements of your vital signs (pulse, blood pressure, temperature), and your height and weight
- Routine blood tests
- Imaging of your tumors to determine their size and location before starting the study (usual imaging methods include CT, MRI, PET/CT, mammography, ultrasound)

These exams, tests or procedures are part of regular clinical care and may be done even if you do not join the study.

The following tests or procedures will be done prior to starting study treatment:

- Research blood collection (about 3 tablespoons)

We will collect the research blood at the same time blood is being collected for your regular clinical care.

If you are eligible and interested in starting the study, you will be given a prescription for estradiol. We would like you to take your first dose of estradiol in the clinic, so we know when you start.

Estradiol is a pill or tablet that you will take by mouth with water three (3) times per day. You will take estradiol every day for 28 days. This 28 day period is called a "cycle." Please take your pills at about the same times every day. If you forget to take a pill and it is more than 4 hours until your next dose, you should take the dose. If it is less than 4 hours until your next dose, skip

the forgotten dose and take the next dose. If you vomit after taking a dose, do not retake the dose. Resume your schedule with the next dose.

You will be given a diary to record when you take your study drug. You will need to return to Mayo Clinic every month for a re-evaluation before starting your next cycle of treatment. You will be asked to bring your diary, empty pill bottle(s) or any remaining tablets at the end of each cycle.

You should avoid grapefruit and grapefruit juice while taking estradiol. Grapefruit and grapefruit juice can prevent absorption of estradiol in your gut. Other foods may also have this effect. Check with your pharmacist if you have any questions about your diet while taking estradiol. Tissue and blood specimens are mandatory for this study. You will be asked to have biopsies to collect tissue, and blood draws (taken at the same times as your clinical blood tests) for this study.

Below is a table that shows the procedures and study visits.

Time	What will happen
Pre-Screening	• Tissue samples sent to Mayo Clinic for pre-testing (you signed a separate consent form to send these samples)
Pre-Study	• Routine tumor biopsy if not enough tissue is available from a previous biopsy • Routine physical exam • Routine blood tests • Measurement of your tumors by imaging (usual methods include: MRI, CT, PET/CT, mammography, US) • Research blood collection • Submission of tissue specimens for research testing
Cycle 1, Day 1	• Start taking estradiol 3 times per day and continue to take it every day
After Cycle 1, before Cycle 2	• Research blood collection • Research tumor biopsy
Day 1 of each cycle (every 4 weeks or 28 days) starting with Cycle 2	• Routine physical exam • Routine blood tests • Review of your medication diary • Research blood collection • Continue taking estradiol every day

Time	What will happen
Every other cycle starting at the end of Cycle 2 (end of Cycle 4, Cycle 6, etc.)	• Imaging scans to document tumor size
At progression	• Routine physical exam • Routine blood tests • Imaging scans to document tumor size • Research blood collection • Research tumor collection if clinical biopsy is done at this time
Follow-up after treatment discontinuation	• After you stop the study medication, you will be contacted by the study team during a clinic visit or by telephone every 6 months for a maximum of 5 years after you start this study

You will be informed of any clinically relevant research results. Any results reported to you individually, will also be placed in your medical record. Study results will be reported on ClinicalTrials.gov after the study is completed.

What are the possible risks or discomforts from being in this research study?

Standard of Care Risks
Your doctor will discuss the risks of procedures performed as part of your standard care as these tests and procedures are part of your standard clinical care.

Estradiol

Likely risks of estradiol *(events occurring greater than 20% of the time)*

- Nausea
- Vomiting
- Abdominal cramps
- Bloating
- Headache
- Dizziness
- Irritability
- Mood changes
- Vaginal bleeding or spotting

- Yeast infection
- Breast tenderness, enlargement, pain
- Nipple discharge
- Increase or decrease in weight
- Swelling of feet and legs (edema)
- Leg cramps
- Increase in blood pressure (hypertension)

Less likely risks of estradiol *(events occurring less than or equal to 20% of the time)*

- Allergic reaction including hives, rash, itching
- Gall bladder problems
- Eye problems including changes in vision and intolerance of contact lenses

Rare but serious risks of estradiol *(events occurring less than 2-3% of the time)*

- Severe allergic reaction (anaphylaxis)
- Endometrial cancer
- Breast cancer
- Blood clots (retinal vascular thrombosis, deep vein thrombosis, pulmonary embolism, stroke)
- Heart disease including heart attack
- Pancreatitis

Blood Draws

The risks of drawing blood include pain, bruising, lightheadedness, and/or fainting, or rarely, infection at the site of the needle stick.

Biopsies

Biopsies are normally performed under the guidance of an imaging technique (such as ultrasound or x-ray). Each procedure requires a separate clinical 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 complications might require additional surgical intervention.

Lymph node biopsy
Likely: local discomfort and minor bleeding

Rare: moderate or major bleeding, need for blood transfusion, lung collapse, hospitalization due to bleeding or other complications, infection, damage to bowels, damage to nearby organs, allergic reaction to the numbing medicine

Liver biopsy
Likely: local discomfort and minor bleeding

Rare: moderate or major bleeding, need for blood transfusion, lung collapse, hospitalization due to bleeding or other complications, infection, damage to bowels, damage to nearby organs, allergic reaction to the numbing medicine

Lung biopsy
Likely: local discomfort and minor bleeding

Possible (approximately 10% risk): partial lung collapse which may be associated with shortness of breath, pain with inspiration, and need for hospitalization.

Rare: moderate or major bleeding, need for blood transfusion, complete lung collapse, hospitalization due to bleeding or other complications, infection, cough, damage to nearby organs, allergic reaction to the numbing medicine. In the event of complete lung collapse, shortness of breath, pain with inspiration, chest tube placement and hospitalization are likely.

*If you are a smoker or have COPD or other chronic pulmonary disease, your risk of complications from a lung biopsy is greater than those who do not smoke or do not have an underlying pulmonary disease.

Radiation risk from biopsies
Biopsies may be performed using CT guidance or mammography. You will be exposed to radiation during these tests. The amount of radiation you would get has a low risk of harmful effects.

Genetic Information Nondiscrimination Act (GINA)
The Genetic Information Nondiscrimination Act (GINA) may help protect you from health insurance or employment discrimination based on genetic information.

The law provides that health insurance companies and group health plans

- may not ask for genetic information from this research and
- may not use genetic information when making decision about eligibility or premiums

The law will not stop health insurance companies from using genetic information to decide whether to pay claims. The law also will not help you get other types of insurance (such as: life, disability or long-term care).

Risks Associated with Genomic Testing
Despite the GINA protections and the best efforts of the research team, there may still be a risk if information about you were to become known to people outside of this study.

Genetic information is unique to you, even without your name or other identifiers. For this reason, genetic information like DNA may be used to identify you and possibly your family members. We have procedures (such as, labeling your biospecimens with a password protected code known only to select research staff) to prevent people working with your DNA from discovering if it belongs to you. However, there is the risk this can happen as new ways of tracing genetic information are being developed that may make re-identification of genetic information possible.

Unforeseeable Risks
Many side effects go away shortly after the study drugs are stopped, but in some cases side effects can be serious, long lasting, or may never go away. There may be a risk of death. Some side effects may not be known. Side effects may range from mild to life-threatening. Other drugs may be given to make side effects less serious and less uncomfortable. Talk to the researcher and/or your healthcare provider about side effects and ask any other questions.

This study involves testing your DNA, which is the genetic information you inherited from your parents (also known as genetic testing). This testing may include whole genome sequencing (mapping your entire genetic code). You will not be notified of the genetic test results and they will not be put into your medical record.

Are there reasons you might leave this research study early?

You may decide to stop at any time. You should tell the Principal Investigator if you decide to stop.

In addition, the Principal Investigator, the study sponsor, or Mayo Clinic may stop you from taking part in this study at any time:

- if it is in your best interest,
- if you don't follow the study procedures,
- if the study is stopped.

If you leave this research study early, or are withdrawn from the study, no more information about you will be collected; however, information already collected about you in the study may continue to be used.

We will tell you about any new information that may affect your willingness to stay in the research study.

What if you are injured from your participation in this research study?

Where to get help:
If you think you have suffered a research-related injury, you should promptly notify the Principal Investigator listed in the Contact Information at the beginning of this form.

Who will pay for the treatment of research related injuries?
Care for such research-related injuries will be billed in the ordinary manner, to you or your insurance. You will be responsible for all treatment costs not covered by your insurance, including deductibles, co-payments and coinsurance. The study will not offer free medical care or payment for any bad side effects from taking part in this study.

What are the possible benefits from being in this research study?

This study may not make your health better. However, if the study treatment is effective you may benefit by having your tumor get smaller which may help you live longer and improve any symptoms you may be experiencing as a result of the tumor. Researchers may also gain knowledge from this study that may help other patients in the future.

What alternative do you have if you choose not to participate in this research study?

You don't have to be in this study to receive treatment for your condition. Your other choices may include other chemotherapy, other clinical trials or no treatment for your disease. Talk to the Principal Investigator or your doctor if you have any questions about any of these treatments or procedures.

What tests or procedures will you need to pay for if you take part in this research study?

You won't need to pay for tests and procedures which are done just for this research study. These tests and procedures are:

- Research testing on blood and tissue including ERβ testing
- Research biopsy at the end of Cycle 1

However, you and/or your insurance will need to pay for all other tests and procedures that you would have as part of your clinical care. These tests and procedures include:

- Clinical biopsy prior to starting this study to make sure the cancer is triple negative breast cancer
- Study drug, estradiol (generic oral drug)
- Regular physical exams
- Regular blood testing
- Regular imaging (MRI, CT, PET/CT, mammography, US)

You and/or your insurance will need to pay for all other tests and procedures that are part of this research study because they are part of care for your cancer. You might also have to pay for other drugs or treatments given to help control side effects. Before you take part in this study, you should call your insurer to find out if the cost of these tests and/or procedures will be covered. You will have to pay for any costs not covered by your insurance. You will also be responsible for any co-payments or deductibles.

If you have questions about any costs to you that may result from taking part in the research, please speak with the Principal Investigator. If you wish, arrangements can be made for you to speak with someone in Patient Financial Services about these costs.

If you have billing or insurance questions call Patient Account Services at the telephone number provided in the "Contact Information" section of this form.

Will you be paid for taking part in this research study?

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

There is a very small chance that some commercial value may result from the use of your donated samples. This could include new products like a drug or a test to diagnose a disease. If that happens, you won't be offered a share in any profits.

Will your information or samples be used for future research?

Your information and samples will be sent to the Sponsor, Mayo Clinic. The Sponsor can use your data and samples for research purposes only as described in the research study. Your data and samples will be sent to the Sponsor in a coded format, which protects your identity. Mayo Clinic may destroy the samples at any time without telling you. We will test your tissue and blood as part of this study. In addition, we would like to keep your study information and samples for future research. You can still take part in this study without giving permission to use your data and samples for future research. If you agree to give your sample, it will be the property of Mayo Clinic and TBCRC.

Researchers at Mayo Clinic and TBCRC who aren't involved with this study may ask to use your sample for future research. Researchers at other institutions which are part of TBCRC may also ask for a part of your sample for future studies. Your sample will be sent to researchers in a coded format, which protects your identity.

Some future studies may examine your DNA, which is the genetic information you inherited from your parents (genetic testing). If there are findings which may be useful for your health care, the researchers may contact Mayo Clinic, so Mayo Clinic can give you the option of learning the results. You would be given general information on the potential risks, benefits, and costs of choosing to learn about the findings.

To support future research, de-identified genetic information may be placed in databases accessible by the internet. Some of the information may be available to anyone using the internet, and some will be released only to approved researchers. Combined study information (including genomic summary results) may be published, but the information will not identify you.

Even though information traditionally used to identify you will not be shared, people may develop ways in the future to allow someone to link your genetic information back to you. For this reason, confidentiality cannot be guaranteed. It is also possible that re-identified information could be used in discriminating ways, and there could be additional unknown risks. We will make every effort to protect your confidentiality.

Please read the following statements and mark your choices:

1. I permit my information and samples to be stored and used in future research to learn about, prevent or treat cancer:

☐ Yes ☐ No Please initial here: _____Date: _____

2. I permit my information and samples to be stored and used in future research to learn about, prevent, or treat any other health problems (for example: causes of diabetes, heart disease, and Alzheimer's, or genetic links to alcoholism):

☐ Yes ☐ No Please initial here: _____Date: _____

3. I agree to have my coded genetic information and coded medical information placed in password-protected secured databases for research analyses.

☐ Yes ☐ No Please initial here: _____Date: _____

4. I agree that my study doctor, or someone on the Mayo Clinic study team, may contact me to see if I wish to participate in other research in the future.

☐ Yes ☐ No Please initial here: _____Date: _____

You may withdraw your consent for future use of your information and/or samples at any time, by writing to the Principal Investigator at the address provided in the "Contact Information" section of this consent form.

Your information and/or samples would be removed from any repository where they are stored, if possible. Information and/or samples already distributed for research use will not be retrieved. Because we cannot predict how your sample will be used in the future, we cannot promise that samples can be retrieved and destroyed.

It is possible that information identifying your samples or your data could be removed. These samples and data will no longer be linked to you. If that were to happen, the samples and data could be used for future research studies or given to another researcher without asking for your permission.

How will your privacy and the confidentiality of your records be protected?

Mayo Clinic is committed to protecting the confidentiality of information obtained about you in connection with this research study. All of your research samples transferred to the Mayo Clinic or designee will be labeled with a code number and kept in locked storage. Only your study doctor will be able to link your samples with your identity. No one working with your samples will know your identity. If the results of the research are made public, information that identifies you will not be used.

During this research, information about your health will be collected. Under Federal law called the Privacy Rule, health information is private. However, there are exceptions to this rule, and you should know who may be able to see, use and share your health information for research and why they may need to do so.

Information about you and your health cannot be used in this research study without your written permission. If you sign this form, it will provide that permission (or "authorization") to Mayo Clinic.

Your health information may be collected from:

- Past, present and future medical records.
- Research procedures, including research office visits, tests, interviews and questionnaires.

Your health this information will be used and/or given to others to

- Do the research.
- Report the results.

See if the research was conducted following the approved study plan and applicable rules and regulations.

Your health information may be used and shared with

- Mayo Clinic, the sponsor of this study and the people or groups that help perform this research
- Johns Hopkins on behalf of the Translational Breast Cancer Research Consortium (TBCRC)
- The Translational Breast Cancer Research Consortium (TBCRC)
- The Mayo Clinic Institutional Review Board that oversees the research
- Other Mayo Clinic physicians involved in your clinical care
- A group that oversees the data (study information) and safety of this research(Including if there is a data and safety monitoring board or similar oversight group).
- Researchers involved in this study at other institutions through TBCRC
- Federal and State agencies (such as the Food and Drug Administration, the Department of Health and Human Services, the National Institutes of Health and other United States agencies) or government agencies in other countries that oversee or review research
- The sponsor(s) of this study and the people or groups it hires to help perform this research

How your information may be shared with others:

While taking part in this study, you will be assigned a code that is unique to you but does not include information that directly identifies you. This code will be used if your study information is sent outside of Mayo Clinic. The groups or individuals who receive your coded information will use it only for the purposes described in this consent form.

If the results of this study are made public (for example, through scientific meetings, reports or media), information that identifies you will not be used.

In addition, individuals involved in study oversight and not employed by Mayo Clinic may be allowed to review your health information included in past, present, and future medical and/or research records. This review may be done on-site at Mayo Clinic or remotely (from an off-site location). These records contain information that directly identifies you. However, the individuals will not be allowed to record, print, or copy (using paper, digital, photographic or other methods), or remove your identifying information from Mayo Clinic.

Is your health information protected after it has been shared with others?

Mayo Clinic asks anyone who receives your health information from us to protect your privacy; however, once your information is shared outside Mayo Clinic, we cannot promise that it will remain private, and it may no longer be protected by the Privacy Rule.

Your Rights and Permissions

Participation in this study is completely voluntary. You have the right not to participate at all. Even if you decide to be part of the study now, you may change your mind and stop at any time. You do not have to sign this form, but if you do not, you cannot take part in this research study.

Deciding not to participate or choosing to leave the study will not result in any penalty. Saying 'no' will not harm your relationship with your own doctors or with Mayo Clinic.

If you cancel your permission for Mayo Clinic to use or share your health information, your participation in this study will end and no more information about you will be collected; however, information already collected about you in the study may continue to be used.

You can cancel your permission for Mayo Clinic to use or share your health information at any time by sending a letter to the address below:

Mayo Clinic
Office for Human Research Protection
ATTN: Notice of Revocation of Authorization
Plummer Building 3-02
200 1st Street SW
Rochester, MN 55905

Alternatively, you may cancel your permission by emailing the Mayo Clinic Research Participant Advocate at: researchparticipantadvocate@mayo.edu.

Please be sure to include in your letter or email:

- The name of the Principal Investigator,
- The study IRB number and /or study name, and
- Your contact information.

Your permission for Mayo Clinic to use and share your health information lasts forever, unless you cancel it.

Enrollment and Permission Signatures

Your signature documents your permission to take part in this research.

Printed Name Date (mm/dd/yyyy) Time (hh:mm am/pm)

Signature

Person Obtaining Consent

- I have explained the research study to the participant.
- I have answered all questions about this research study to the best of my ability.

Printed Name Date (mm/dd/yyyy) Time (hh:mm am/pm)

Signature