Participant Informed Consent for Clinical Research

Study title for participants: Exercise Treatment with Standard Therapy for Metastatic Breast Cancer

Official study title for internet search on http://www.ClinicalTrials.gov: Phase 1 Trial of Exercise Treatment with Concurrent First-Line Therapy for Hormone Receptor Positive Metastatic Breast Cancer

Lead Researcher: Neil Iyengar, MD (646-888-8103)

Overview and Key Information

What am I being asked to do?

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 have been asked to take part in this research study because your breast cancer has spread to another part of your body, and you will be, or you are receiving initial treatment for your cancer. A sample of your tumor tissue has tested positive for hormone receptors (HR+) and negative for human epidermal growth factor 2 (HER2-), two commonly tested genes that help doctors decide which therapies might be most effective in treating your cancer.

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. See the *Where can I get more information?* section of this document for more information about research studies and for general information about cancer.

Why is this study being done?

This study is being done to answer the following question:

What is the maximum amount of exercise that is beneficial to patients with HR-positive, HER2-negative metastatic breast cancer (MBC) during first-line treatment for their disease?

What is the usual approach to my metastatic breast cancer?

People with metastatic HR-positive, HER2-negative breast cancer who are not in a research study are usually treated with hormone therapy which may also include a type of targeted therapy called a CDK4/6 inhibitor. Common hormonal therapy treatments include tamoxifen, aromatase inhibitor, or fulvestrant; common CDK4/6 inhibitors include palbociclib, ribociclib, or abemaciclib. Hormone therapy or the

combination of hormone therapy plus a CDK4/6 inhibitor are approved by the US Food and Drug Administration (FDA) for first-line treatment of HR-positive, HER-2 negative metastatic breast cancer and is considered to be the standard of care for this disease. These treatments are given to reduce symptoms, and they may stop your tumor from growing for several months or longer.

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 participate in individualized walking sessions up to 7times a week for 6 months while you are receiving breast cancer treatment, as described above in the “usual approach” section.

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.

If you choose to take part in this study, there is a risk that the study intervention may not be as good as the usual approach alone at shrinking or stabilizing your cancer.

There is also a risk that you could have side effects from the study intervention. These side effects may be worse, and they may be different than you would have with the usual approach for your cancer.

Some of the most common side effects that the study doctors know about are:

- Fatigue
- Muscle and joint pain

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

Benefits

There is no direct benefit to you from being in this study.

Exercise has been shown to prevent or slow the growth of tumors when it is used in combination with standard anticancer therapies, but we do not know whether this will happen in people with metastatic breast cancer. This study may help the researchers learn things that could 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: 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)

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 any good and bad effects of aerobic exercise performed while you are receiving the usual first-line treatment for metastatic breast cancer. The researchers think that exercise helps delay the development of resistance to hormone therapy, which is when the cancer starts growing again despite being on treatment. The researchers also think that exercise may slow the growth of tumors.

Earlier studies of the effects of exercise on cancer had only a small number of participants, and the studies did not produce enough research information (data) to answer the study question. In this study, exercise is being administered as an equal part of the first-line treatment for metastatic breast cancer, and the researchers hope to learn more about how and why exercise may affect your cancer.

The overall goal of this study is to determine the maximum feasible dose (MFD) of exercise. This means, the amount of exercise that participants are successfully able to complete. This will help determine the dose of exercise that should be further tested in future studies.

About 53 people will take part in this study at Memorial Sloan Kettering Cancer Center (MSK) and participating centers. We estimate the study will take about 3 years to complete. At the conclusion of the study, you will receive a thank you letter for your participation along with a summary of the results.

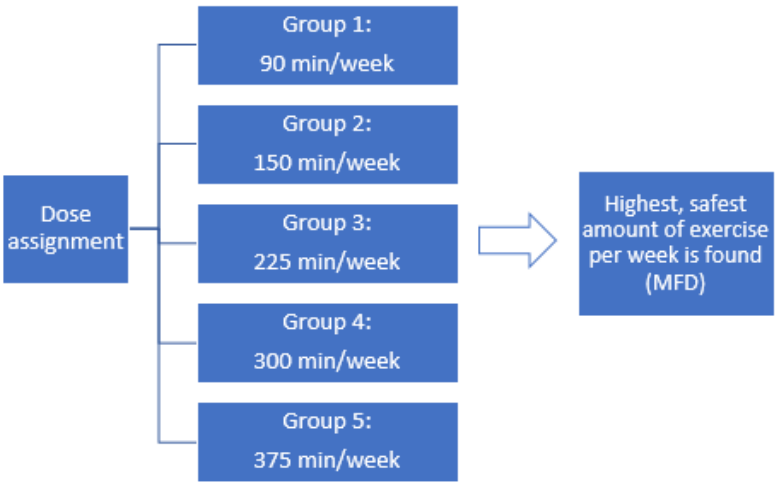
What are the study groups?

This study has one part, which will test increasing amounts of weekly exercise in different groups of study participants to find the highest, safest amount of exercise per week. All participants in this study will be required to exercise for a certain number of minutes per week. Exercise training sessions will occur in your home and will be virtually supervised. These home-based exercise sessions will be

implemented and monitored using a telemedicine approach established in the Exercise-Oncology (ExOnc) Service. This approach is known as TeleEx.

Figure 1. A patient exercising via TeleEx

The amount of weekly exercise you are required to perform will depend on when you enter the study. The first group of study participants will perform the lowest amount of exercise, 90 minutes of walking per week. If this amount of exercise does not cause any serious side effects, the next group will exercise for a longer amount of time per week. The weekly exercise requirements will continue to increase through a total of 5 levels if no serious side effects occur. The five levels (doses) are 90, 150, 225, 300 minutes, and 375 minutes of exercise per week. Both you and your study doctor will know how long you will be required to exercise each week. The study is expected to last about 6 months.



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

Before you begin 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 this study. If you join the study, you will have more exams, tests, and procedures so that the study team can continue to look out for your safety and health. Most of these tests and procedures are part of the usual care that you would have if you were not in a study.

Some exams, tests, and procedures are a necessary part of this research study, but they would not be part of the usual care for your condition. The 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.

- Exercise test: You will walk on the treadmill at gradually increasing speeds and/or incline until your heart rate reaches 80% of your maximum heart rate, adjusted for your age.

  - The test will be stopped before you reach maximum fatigue. If you experience any uncomfortable symptoms during this test, alert the exercise physiologist.
- You will complete questionnaires that ask about your quality of life, current level of exercise, cancer symptoms, and overall well-being. These questionnaires will take about 15 minutes to complete and may be filled out on paper or electronically on a tablet.
- If you are not a patient at MSK, you will be asked to complete a Demographic Form. The information that is collected on this form will be used by the research team to generate an MSK Medical Record Number (MRN) for your participation on study.
- Samples of your blood will be collected for research testing. These samples will be collected at a routine visit you have at MSK or your participating site. You should not eat or drink anything except water for 8 hours before you give blood for this test. The blood sample will be tested for cell-free DNA (cfDNA), small pieces of genes free-floating in the blood. The cfDNA test shows whether mutated cancer genes from your tumor can also be found in your blood. We will track the amount of cfDNA in your blood at different times during and after the study intervention, which may be related to your response to the treatment.
- Samples of your stool will be collected for research testing. The stool samples will be tested to monitor the health of your digestive system in order to determine if exercise improves your digestive health. Stool samples will be collected at home. For questions about stool collection specifically, please contact the MSK study team.
- You will be asked to undergo an optional tumor biopsy procedure. More information about this procedure is provided in the *Optional studies* section of this consent form.
- If you do not have a recent electrocardiogram within the last ~6 months from either MSK or outside, you may be asked to complete a remote electrocardiogram prior to starting the study to ensure safe participation. A handheld device will be used to complete the ECG from your home.

During the study:

You will receive a study kit that includes a treadmill, an activity tracker wristband, heart rate monitor, blood pressure cuff, scale, and electronic tablet device to use during the exercise sessions. You may also receive glucose sensors and glucose drinks. You will receive a new patient orientation session to review how and when to use each item in your study kit. The treadmill and the study kit will be shipped to your home. MSK owns the treadmill, tablet, and study kit; you will use them while you are taking part in this study, and you will have to return them when your participation in the study ends.

Figure 2. Activity Tracker

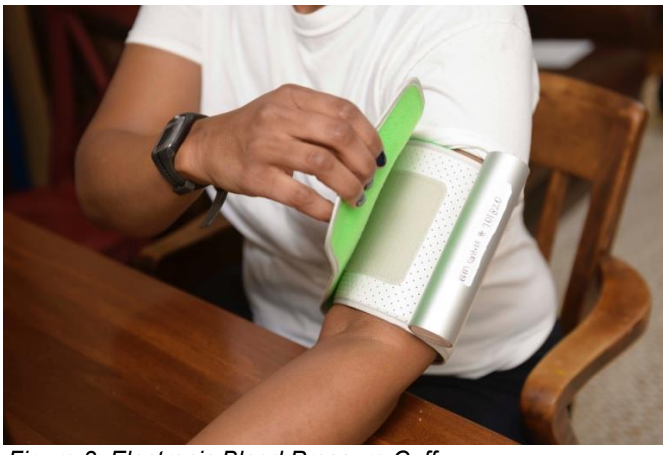


Figure 3. Electronic Blood Pressure Cuff

Figure 4. Body Composition Scale

Figure 5. Tablet in use during session

You will complete all the exercise sessions on a treadmill at home. These sessions will be supervised by an Exercise Physiologist and will occur during virtual visits using the tablet device. These virtual visits will not be recorded. You will receive an individualized exercise program in which you will walk on the treadmill for a specified total number of minutes for 3 to 7 days every week. The length of individual exercise sessions will range from 20 to 75 minutes depending on the amount of exercise you are assigned to complete per week. When you receive your dose assignment, the exercise physiologist(s) will let you know how many days and total minutes you should expect to exercise every week. Your goal is to reach the total number of minutes of exercise (not including the warm-up and cool-down). The intensity level of the exercise sessions is considered mild to vigorous; this range of intensity is safe and tolerable for the people who are participating in this study.

If your exercise sessions are scheduled to take place at the same time as those of other study participants, a “virtual training space” using the tablet’s meeting conference feature will be used. This technology allows study staff members to interact with several study participants at the same time. You will be able to schedule these sessions on days and times of your choosing. Exercise sessions may be scheduled Monday through Friday from 6:15am to 7:45pm (EST). The study team will confirm with you the range of times and days that the study staff are available.

You will be asked to fast for about 2 hours before each exercise session, although you may have a light snack (piece of fruit, granola bar, etc.). Do not consume caffeine or use tobacco within 2 hours of each session and avoid alcohol consumption within 6 hours of an exercise session.

<u>Exams, Tests and/or Procedures</u>
You will need the following extra tests and procedures. Some exams, tests, and procedures are a necessary part of this research study, but they would not be part of the usual care for your condition. The 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.

- Wear the activity tracker like a watch throughout your participation in the study. The tracker will record:

  - Your general physical activity, using a step count based on your motion. The tracker automatically detects the duration and distance of walking and other exercises and movements.
  - Your sleep patterns, including how long it takes you to fall asleep, how long you sleep, sleep cycles, and sleep interruptions. You may also receive a sleep tracking mat, if applicable. This data can be sent to the study doctor using the mobile application (app) installed on the tablet.
  - Your heart rate, in beats per minute
- Use the scale to measure your weight, fat mass, muscle mass, water weight, and bone mass every day. These measurements will be sent to the study doctor using the mobile app.
- Wear the optical heart rate monitor that captures your changing heart rate while you are exercising.
- Use the blood pressure monitor to measure your blood pressure every day.
- Samples of your blood will be collected for research testing. These samples will be collected at a routine visit you have at MSK or your participating site. You should not eat or drink anything except water for 8 hours before you give blood for this test.
- Samples of your stool will be collected for research testing. Stool samples will be collected at home. For questions about stool collection specifically, please contact the MSK study team.
- During Week 12, you will repeat the exercise test (as described above)
- At the beginning, middle, and end of the study, you may choose to wear a sensor on the back of your arm to measure the amount of glucose in your blood. You may also be asked to consume a glucose drink at the beginning, middle, and the end of the study, unless you have diabetes. Please note that these assessments are optional; more information is provided in the *Optional studies* section of this consent form.
- You will be asked to complete a dietary assessment to log 3 days' worth of meals at the beginning, middle, and the end of the study. You will use a dietary tracking app installed on the tablet that takes photos to identify foods you are consuming to collect information about your calorie and nutrient intake. In addition to this, you may also choose to log meals throughout the study.

Data collected from these assessments will be stored in a mobile app that connects through Validic to your MyMSK (Patient Portal) account. A member of the study staff may sync this connection on your behalf. If the study staff members see anything in your exercise data that they think may affect your safety, your exercise session will be stopped, and the staff member will decide when (or whether) the session can start again.

End of Treatment and Follow-up:

When you finish the 6-month exercise treatment period, you will have the following extra tests and procedures:

- You will repeat the exercise test (as described above)
- You will repeat the questionnaires that ask about your quality of life, current level of exercise, cancer symptoms, and overall well-being.
- Samples of your blood will be collected for research testing. These samples will be collected at a routine visit you have at MSK or your participating site. You should not eat or drink anything except water for 8 hours before you give blood for this test.
- Samples of your stool will be collected for research testing. Stool samples will be collected at home. For questions about stool collection specifically, please contact the MSK study team.

- You will be asked to undergo an optional tumor biopsy procedure. More information about this procedure is provided in the *Optional studies* section of this consent form.

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

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 intervention used in this study may affect how different parts of your body work, such as your liver, kidneys, heart, and blood. The study doctor will be testing your blood throughout the study. The results of these studies will not be added to your medical records, and you and/or your study doctor will not be informed of the test results.

There is also a risk that you could have side effects from the study drug(s)/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 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 study doctor may adjust the study drugs to try to reduce your side effects.

The tables below show 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 aerobic exercise:

Common, some may be serious In 100 people receiving aerobic exercise, more than 20 and as many as 100 may have:
• Fatigue • Muscle pain • Joint pain • Back pain • Shortness of breath (dyspnea) • Leg cramps • Sprain

Common, some may be serious In 100 people receiving aerobic exercise, more than 20 and as many as 100 may have:
• Strain • Fractures

Rare, and serious In 100 people receiving aerobic exercise, 3 or fewer may have:
• Pain in the chest that may radiate to the jaw or arm, because not enough blood is reaching the heart • Low blood pressure, which may cause dizziness, lightheadedness, or fainting • Fast, hard, or irregular heartbeats • Sudden rise in blood pressure after a normal reading (rebound hypertension) • Fainting • Heart attack • Stroke

Possible side effects of the continuous glucose monitoring sensor:
Some individuals may be sensitive to the adhesive that keeps the sensor attached to the skin. If you notice significant skin irritation around or under your sensor, remove the sensor and stop using it immediately.

Possible side effects of the glucose drink:
The glucose drink may cause nausea, vomiting, diarrhea, or fainting.

Reproductive risks: You should not get pregnant, breastfeed, or father a baby while you are in this study. Any treatment that you receive for your breast cancer could damage an unborn baby. Different types of drugs have different precautions; your study doctor can give you more information, depending on which treatment you are receiving. Check with the study doctor about what types of birth control or pregnancy prevention to use while you are in this study. You may need to continue to use these methods for a few months after completing the study treatment.

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
- Let the study doctor know if you skipped or chose not to answer any of the questions in the questionnaire/survey.

Is there a conflict of interest for this study?

This study is sponsored by Memorial Sloan Kettering Cancer Center. This study is being supported administratively by Johns Hopkins University on behalf of the Translational Breast Cancer Research Consortium (TBCRC). The TBCRC is a group of academic medical centers across the United States that work together to conduct breast cancer research. There are no known investigator and/or institutional conflicts of interest for this study.

What are the costs of taking part in this study?

You will not be charged for participating in this study.

You and/or your health plan/insurance company will have to pay for all the costs of your care while you are in this study, including 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, unless these items are listed below:

- Treadmill
- Tablet computer
- Blood pressure cuff
- Activity tracker wristband
- Heart rate monitor
- Scale
- Collection and testing of blood samples for research purposes
- Collection and testing of stool samples for research purposes
- Collection of tumor tissue, if you agree to have one or two optional biopsy procedure(s)
- Submaximal exercise test
- Glucose sensors (optional)
- Glucose drinks (optional)
- KardiaMobile EKG (if applicable)

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.

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

This research may lead to the development of new tests, drugs, or other products for sale. If it does, you will not receive any payment from the sale of these products.

You will receive a $50.00 gift card at your baseline and follow-up appointments.

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.

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. All requests for data sharing will be reviewed by MSK, 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.

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.

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.

In the future, your information (data) and biospecimens (blood, tissue, saliva, etc.) 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.

We are asking your permission to obtain information about you from certain apps and/or devices. These apps are designed and operated by third parties who make or support mobile fitness and nutrition devices. In order to participate in this study, you must agree to use these apps and devices. Any information that you provide to or via these apps or devices is governed by the terms of use and/or privacy policies managed by third parties and/or the platforms on which you purchased them, and not by MSK. However, once MSK receives your information from these apps or devices, MSK will protect the confidentiality and security of the information as described in this research consent.

Certificate of Confidentiality

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 any information that can identify you. At most, the web site will include a summary of the study 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.

Optional studies:

This part of the consent form describes optional studies that you can choose to take part in. You will not get health benefits from any of these studies. The doctors leading this research hope that the results of these studies will help other people with cancer in the future.

The results of these studies will not be added to your medical records, and you and/or your study doctor will not be informed of the test results.

You will not be billed for these optional studies. You can still take part in the main study even if you do not participate in some or all the optional studies. If you sign up for but cannot complete any of the optional studies for any reason, you can still take part in the main study.

Optional tumor biopsy procedures

If you choose to take part in this optional study, you will be asked to undergo 1 or 2 extra tumor biopsy procedures, before you begin the study and after you complete the study intervention. The biopsies of the metastatic or primary tumor site will only be offered if tissue is not available from your standard of care diagnostic biopsy.

The tissue samples collected during these biopsy procedures and any related medical information collected during the study will be used for biomarker research, which studies the way biological differences between people can affect their cancers. Researchers will study your samples to improve our understanding of the way aerobic exercise affects cancer and other diseases. This research may include genetic testing.

We will study your biopsy samples to improve our understanding of the way changes in genes can affect the risk of cancer and other diseases. Genes are the “blueprints” for our bodies. Sometimes genes may have changes that occur during your lifetime that can affect the way a gene works. These changes may cause cells to grow rapidly and abnormally and become a cancer that you cannot pass on to your family members (somatic mutation). However, some people develop cancer because they were born with a mutation in a gene. People who develop cancer because of a genetic mutation usually inherit this

genetic change from their mother or their father (germline mutation). Other family members (brothers, sisters, and children) may share this same mutation. Most people with cancer did not develop their disease because of an inherited mutation.

Neither you nor your doctor will be given the results of any research testing done on your tissue samples. The results of testing your tissue samples will be used only for research, and not to guide your medical care. After your research test samples have been studied, if any part of them is left over, the material will be stored for an indefinite period of time for use in future research. Your sample(s), including your DNA, may be used or stored for as long as they are useful for research purposes.

Risks associated with biopsies include pain, redness, swelling, bleeding, bruising, infection and, rarely, death. The doctor performing the biopsy will explain the details and risks of the procedure, which may vary, depending on how the biopsy sample will be obtained. You will sign a separate consent document before you undergo this procedure.

This research study includes exposure to radiation from x-rays or gamma rays. This radiation exposure is for research purposes only and is not part of your medical care. X-rays and gamma rays from natural or medical sources can damage the genetic material (DNA) in your cells. At low doses, the body is usually able to repair the damage.

The radiation exposure that you will get in this research study is 1.6000 rem (a rem is a unit of absorbed radiation). This is more than the 0.3 rem that the average person in the United States gets each year from natural sources like the sun, outer space, air, food and soil. It is less than the 5 rems of radiation that is allowed each year for people who are exposed to radiation in their jobs.

The radiation exposure described here is what you will get from this research study only. It does not include any exposure you may have received or will receive from other tests outside of this study that are a part of your medical care. If you have questions about the total amount of radiation you will be receiving, you should ask your doctor.

There may be a risk in finding out new genetic information about yourself. New health information about inherited traits that might affect you or your family (blood relatives) could be found during a research study

A Federal law, the Genetic Information Nondiscrimination Act (GINA), generally makes it illegal for health insurance companies, group health plans, and most employers to discriminate against you based on your genetic information. This law generally will protect you in the following ways:

- Health insurance companies and group health plans may not request your genetic information that we get from this research.
- Health insurance companies and group health plans may not use your genetic information when making decisions regarding your eligibility or premiums.
- Employers with 15 or more employees may not use your genetic information that we get from this research when making a decision to hire, promote, or fire you, or when setting the terms of your employment.

Be aware that this Federal law does not protect you against genetic discrimination by companies that sell life insurance, disability insurance, long-term care insurance, or if you are a member of the military,

or receive your health care through TRICARE, the Federal Employees Health Benefits Program, the Veterans Health Administration, or the Indian Health Service.

If you or your family are interested in learning more about inherited risk factors for cancer, ask your study doctor for a referral to MSK's Clinical Genetics Service.

You do not have to undergo these optional biopsy procedures to take part in the main study.

Please check Yes or No. Your medical care will not be affected, no matter what you decide to do.

I agree to have an optional biopsy procedure before beginning the study:

☐ Yes ☐ No

I agree to have an optional biopsy procedure during the follow-up part of the study:

☐ Yes ☐ No

Optional continuous measurement of plasma glucose

If you choose to take part in this optional study, you will be asked to wear a small sensor on the back of your arm at the beginning, middle, and the end of the study. The sensor continuously measures the amount of glucose in your blood. The sensor can be worn for up to 14 days. You will be given more than one sensor. Researchers will use the information from this sensor for future analyses.

You may also be asked to participate in a glucose tolerance test. This test is used to see how your body reacts to glucose. You will be asked to consume a 50 g glucose drink in a fasted state at the beginning, middle, and the end of the study. You will be instructed not to consume any food or water for one hour following the test.

The results from these tests will be used only for research, and not to guide your medical care.

You do not need to have these tests to take part in this study.

Please check Yes or No. Your medical care will not be affected, no matter what you decide to do.

I agree to participate in the continuous measurement of plasma glucose:

☐ Yes ☐ No

I agree to participate in the glucose tolerance test:

☐ Yes ☐ No ☐ N/A

Note: Participants with diabetes may not participate in this assessment

Optional Leftover Biospecimens and Information for Future Research

You have a say in how your leftover biospecimens and information are used in future research. Donating samples for future research is your choice and you may be in the study even if you do not want your samples used or stored for future research.

Please review each question below and choose the answer that is best for you:

1. I permit leftover samples to be stored and used for future research to learn about, prevent, or treat cancer.

   ☐ Yes ☐ No

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

   ☐ Yes ☐ No

3. I agree that someone may contact me in the future to ask me to take part in more research.

   ☐ Yes ☐ No

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

   ☐ Yes ☐ No

This is the end of the section about Optional Studies.

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

Exercise Treatment with Standard Therapy for Metastatic Breast 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: Neil Iyengar, MD and Lee Jones, 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:

- 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
- The sponsor's research collaborators, business partners, subcontractors and agent(s), in the United States or in other countries, working with the sponsor 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
- 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.
- Johns Hopkins University on behalf of the Translational Breast Cancer Research Consortium

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 your medical record 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.

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.

Assessment	Before you begin the study	Baseline assessment	Timing of assessments during intervention	Post-study follow-up
General activities				
Ask about your current exercise behavior	X			
Check other study requirements (space for equipment, Wi-Fi accessibility, etc.)	X			
Check your current medications and medical history	X			
ECG (if needed)	X			
Study-related assessments				
Submaximal exercise test		X	X (during Week 12)	X
Tumor biopsy procedure (Optional)		X		X
Questionnaires		X		X
Assessments during intervention				
General physical activity			Continuous (wearable monitor)	
Sleep			Every day	
Body weight			Every day	
Heart rate			Continuous (wearable monitor)	
Resting blood pressure			Every day	
Collection of blood and stool samples for research tests		X	Once a month	X
Dietary assessment			Weeks 1, 12, and 24	
Measurement of plasma glucose (Optional)			Weeks 1, 12, and 24	
Glucose tolerance test (Optional)			Weeks 1, 12, and 24	

Study Contact Information:

If you have questions about the study, you can contact the study staff by the following methods:

Study Staff	**Contact Methods**
Exercise Physiologist(s), Study Doctor(s), and Lead Researcher (Neil Iyengar, MD)	• Phone: 646-888-8103 • Email: medexonc@mskcc.org • MSK Patient Portal