APPROVED
AS MODIFIED
May 02, 2018
WIRB®

RESEARCH SUBJECT INFORMATION AND CONSENT FORM

TITLE: The STRIVE Study: Breast Cancer Screening Cohort for the Development of Assays for Early Cancer Detection

PROTOCOL NO.: GRAIL-002
WIRB® Protocol #20172414

SPONSOR: GRAIL, Inc.

INVESTIGATOR: Dax Kurbegov, MD
1100 Charlotte Ave Ste 800
Nashville, Tennessee 37203
United States

STUDY-RELATED PHONE NUMBER(S): Dax Kurbegov, MD
615-524-4068
1-833-478-7483

A person who takes part in a research study is called a research subject, participant, or study subject. In this consent form "you" always refers to the research subject.

SUMMARY

You are being asked to participate in a research study. The purpose of this consent form is to help you decide if you want to be in this research study.

Please take your time and read this document carefully before making a decision. You should not join this research study until all of your questions are answered.

Things to know before deciding to take part in this research study:

- Your participation in this research is completely voluntary. You can choose not to participate. If you do decide to participate, you can change your mind at any time, for any reason.
- Your decision will not cause you to lose any medical benefits. If you decide not to take part in this study, your doctor will continue to treat you as usual.
- Your medical records may become part of the research record for this study. If that happens, your medical records may be read, copied, and/or entered into a study database by the research staff, sponsor of this study and government agencies or other groups associated with the study.

If you take part in this research study, you will be given a copy of this signed and dated consent form to keep.

PURPOSE OF THE STUDY

About 120,000 women undergoing screening mammograms will take part in this nationwide study. You are being asked to participate in this research study because you are having routine breast screening as part of your standard medical care.

The main goal of this research study is to learn things to help patients in the future.

The main goal of standard medical care is to provide each patient with the medical care they would normally receive for their individual medical needs. Parts of this study may involve standard medical care.

The purpose of this research and the use and disclosure of your information is to see if an experimental blood test can find breast cancers that mammograms find and breast cancers that mammograms do not find. The test looks for small pieces of genetic material in the blood that may indicate the presence of cancer very early in its development. In addition, the research will evaluate if the experimental test can avoid or exclude non-cancer problems that are often detected by mammography and can result in unnecessary additional screening, biopsies and surgeries. This study will also evaluate the ability of the experimental test to detect other breast cancers in their early stages. This study will also help researchers understand how cancer develops.

Most cancers involve a change in the genes of the cells in one of the body's organs or tissues, leading to abnormal growth causing a tumor mass. Tumors are usually found when they can be felt or through imaging, such as an X-ray. Genetic sequencing involves the study of DNA isolated from cells in the body, for example, from blood or from a tumor, and is used to find changes in genes. The sponsor of this study is using genetic sequencing, including whole genome sequencing, to help find new ways to detect cancer and other diseases earlier through a blood test. A blood test may be less invasive than other forms of cancer screening tests available today, and may help find genetic abnormalities before a tumor is felt or seen by imaging. Finding cancer earlier could lead to more and better cures.

To develop such a blood test requires samples from thousands of people as well as medical information about the health of sample donors. This information can include conditions directly related to the cancer, conditions that might make it more likely for a person to develop cancer, and other medical conditions that may not be cancer-related but affect the overall health of the participant. Because the health of a study participant may change over time, it is also important to be able to collect follow-up information about participants' health for months or years after the sample donation to study the relationship between the genetic test results and changes in health after the sample is taken.

The test being developed using information from this research study is in the research phase of development and has not yet been validated or proven and is not appropriate for use to diagnose any condition you may have. If you participate in this study, you are agreeing that the results from this study or the testing of your blood or tissue samples will not be returned to you, your doctor or your healthcare team.

PROCEDURES

A member of the study staff is available to review the study with you and answer any questions you may have. If you participate, we will ask you to sign a consent form before having any study related procedures.

If you agree to participate, your initial participation in this study will last for about 5 years. Your standard medical care will not change and you may need to come to the clinic for additional visits outside of what is required for your standard medical care.

After you provide your consent, study staff will ask you to complete a questionnaire, expected to take no more than 30 minutes either at your mammography visit or at home on your computer or other device. We will also collect information about your medical care and health for at least 5 years. After this time, we will collect information about your health for up to 75 years through information provided by your doctor to the state and federal health databases. We may also contact you directly.

While your active participation in this study will be relatively short, your samples, and the data resulting from their analysis, may be studied for many years.

If you agree to participate in this study and provide informed consent, the following procedures/evaluations will be done:

Initial Blood Collection:

A total of 3 tablespoons (or about 40 mL) of blood will be collected in 4 tubes.

The blood collection tubes used in this study are investigational and have not been cleared or approved by the FDA.

Questionnaire:

We will ask you some questions about your breast health and general health. The answers will be collected online using an electronic tablet in the clinic or your own electronic device at home. After the initial questionnaire, we may also send brief, follow-up questionnaires to assess your health.

Results from Cancer Screening Procedures:

We will request from your study doctor information about:

- The results of your mammogram
- Additional breast imaging procedures that you may undergo
- In the event you are diagnosed with cancer, details about the tumor features and stage at diagnosis of the cancer
- If your doctor schedules you for a biopsy or surgery, a sample of the tissue, if there is tissue available in excess of what is required for your standard clinical care**.**

Medical Record Review:

We will collect certain information about you during the course of this study. This information may include:

- population information such as your age, race, ethnicity and other descriptive information,
- medical information such as your medical history, any current medical conditions you have, medications you take, your standard laboratory test results, and imaging results,
- medical reports such as reports on your mammography or other imaging tests, reports on operations you have had, pathology reports, summaries and clinical notes prepared by your doctor,
- detailed imaging information such as your unprocessed and processed mammography images.

Follow-up (Up to Year 5):

We will request your mammography results and information about your general health during the 30 months following your initial mammogram. We may also contact you via mail, phone, or e-mail to ask you additional questions about your mammography experience or breast health for the next 5 years. During this 5-year period, you may also be asked to provide additional blood samples if you develop breast cancer or another type of cancer during the 30 months after your initial screening mammogram. If you are asked to provide an additional blood sample, the blood collection procedures and amounts as outlined above in "Initial Blood Collection" will be followed. No more than 3 additional samples will be collected from you during the course of the study.

Long-Term Follow-Up (Beyond Year 5):

To learn about your health status in the future, we will use state and/or national databases (registries) that capture information about all cancer diagnoses, death, and other related medical information. By signing this consent form, you agree to allow state or national cancer registries to release your name and information about any cancer diagnoses or related diagnoses to Sarah Cannon for research purposes only. Your permission to release this information will last for 75 years.

What will happen to your samples?

Your coded samples will be stored in a freezer and then analyzed in laboratories associated with or working for the Sponsor, GRAIL, Inc. Information from the tests performed on your blood and tissue specimens (if collected) will be combined with information from your medical record and health history. The results will be analyzed together with the results of other women participating in the study. This information will be used to help develop a test that can identify breast cancer in its earliest stages and to explore the characteristics of women with cancer, potential causes of breast and other cancers, and new potential diagnostic tests, treatments, and/or factors that predict response to treatment or disease outcome in people with breast and other cancers and related conditions. Your samples will be kept until they are used up for purposes described in this study. In this study, testing of your blood samples may go on for long

periods of time. Therefore, while your active participation in this study will be short, your samples, and the data resulting from their analysis, may be studied for many years.

Your samples will undergo genetic testing including genetic sequencing of your entire genome. Genetic testing includes research that studies the characteristics and genes that are found in the body's cells. Genes are made of DNA, which contains the instructions for your body's development and function. This information determines traits that are passed on from parent to child, such as eye and hair color and the risk/chance you will get certain diseases. Genes also tell your cells to make substances (including proteins) that appear in your blood. RNA (ribonucleic acid) is made from DNA. RNA is a genetic material that has a major role in making proteins. Researchers are examining DNA, proteins (biomarkers) and RNA to look for genetic changes that cause cells to not work properly and cause disease. Some of the genetic changes that can cause disease are known. Researchers are working on finding other genetic changes causing disease. Results from any research testing (including genetic testing) performed as part of this study will not be shared with your or your healthcare provider.

If it is determined after you are enrolled that you are no longer eligible for participation, any samples that you provided during your participation may be kept and used for the other research described in this form.

You may request that your samples be withdrawn from further study at any time. Your request should be in writing to the study doctor. This request will eliminate future release of your samples and information to new investigators. However, if your samples and information have already been released, such as to the study sponsor (GRAIL, Inc.), your samples cannot be returned. Any previous use of your sample cannot be retracted.

The results of this research carried out for this study may be presented at scientific meetings or in scientific publications; however, any directly identifying information about you will be removed so that no results can be easily associated with you. You will not be individually informed of the results of this research.

RISKS AND DISCOMFORTS

Blood Draw

When blood is drawn from your vein, there may be temporary discomfort and slight bleeding and/or bruising, lightheadedness or fainting during and shortly after blood draw, or slight irritation at the blood draw site. These are common risks related to drawing blood. In rare instances, you may get an infection at the puncture site.

Confidentiality of Data:

Research access to your health information poses a small, but unlikely risk for breach of privacy of your health information. Reasonable precautions will be taken to protect your health information and keep it confidential. Your name will never be identified in any report or publication of results generated from this study. Information that could easily identify you will not be included on the labels for your blood and tissue samples, and identifiers, such as your

name, social security number, address and phone number will be removed from the clinical information that is collected from your medical record for use in this research. All samples and information are labeled only with the assigned special study identification numbers and are handled and kept securely. Only trained research staff will be granted password-protected access to the electronic systems used to manage the study information and data.

Information we collect from you electronically (using a computer, tablet or other device), including questionnaires, will be stored securely. Electronic records will be kept on secure, password-protected servers.

We will keep your involvement with this study confidential (private) to the extent allowed by law. Federal regulatory agencies, the study sponsor and the Institutional Review Board may inspect or copy records related to this research. Some of the records may include information that could identify you.

Authorized representatives of the sponsor, GRAIL, Inc., the medical center conducting the study, the Food and Drug Administration (FDA), and the office of Human Research Protections (OHRP) may examine your medical records as part of this research, and reasonable efforts will be made to ensure there will be no breach of confidentiality.

No information from this project, including the possibility of your risk for developing cancer based on your genetics, will be given back to you or your health care provider. Research data from the study will be stored separately from your medical records.

All results generated are for research purposes only. You should not expect to get personal results from this research study. The sponsor doing the research testing will not give results to you, your doctor, or put results in your health record. It is not currently known how the research results would help you or your health care providers make decisions about your health care. If you are interested, you may ask your doctor about other methods of genetic testing that are clinically available from other laboratories outside of this research.

Genetic Research:

A Federal law, called the Genetic Information Nondiscrimination Act (GINA), effective May 21, 2010, 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, or long-term care insurance.

Other Risks

Participating in this research study will not directly affect your health and you will not receive any study-related treatment. Any health problems discovered during this study will be managed by your doctor using standard medical care.

NEW INFORMATION

You will be told about any new information that might change your decision to be in this study. You may be asked to sign a new consent form if this occurs.

BENEFITS

You will not receive any medical benefits from being in this study. It is not a treatment study. The information produced in the study may help medical researchers develop new ways to find, prevent, and/or treat cancers in the future.

The research results might someday lead to the development of a laboratory test or other commercial product. You will not benefit financially from any products developed as part of this research.

ALTERNATIVES

This is not a treatment study and taking part in this study is your choice. You can choose not to take part in this study. No matter what decision you make, and even if your decision changes, there will be no penalty to you. You will not lose medical care or any legal rights.

FUTURE CONTACT

With your consent, you agree to future contact by authorized study research personnel by phone, mail, or e-mail. Contact may be made for the following possible reasons: to ask you about your current health status, to ask whether you would be willing to provide another blood sample, to inform you about new studies related to the current study or other studies that you may qualify for or be interested to learn more.

COSTS

There are no costs for you related to the research in this study. All research related procedures will be provided free of charge by the sponsor of the study. You or your insurer must provide payment for standard medical care and medical costs unrelated to this study, including the costs of:

- Your mammogram
- Blood draw if you have any other clinical labs done for routine medical care
- Any clinical follow-up that may be needed from your mammogram

PAYMENT FOR PARTICIPATION

You will receive a $25 gift card from the Sponsor, Grail, Inc., for participating in this research study. You are eligible to receive this gift after you complete all of the following:

- Sign this consent form, and
- Complete the initial blood draw within 28 days of your screening mammogram and prior to any breast biopsy your healthcare provider might recommend, and
- Complete the study questionnaire within 28 days of your screening mammogram.

If you are asked to give an additional blood sample you will be given an additional $25 gift card from the Sponsor for each of these requests. Gifts for participation will be distributed on the Sponsor's behalf by an outside vendor.

If any new products, tests, or discoveries that result from this research, or the use of your samples or data, have potential commercial value, you will not share in any financial benefits.

AUTHORIZATION TO USE AND DISCLOSE INFORMATION FOR RESEARCH PURPOSES

Will my health information be kept private?
Federal Privacy Regulations now in place address the sharing of a person's health information. Under these regulations, you have certain privacy rights regarding the use and disclosure of your health information. This information is called Protected Health Information, or PHI. By signing this form, you are authorizing the use and disclosure of your PHI as part of your participation in this study. Your information will only be used in accordance with the provisions of this consent form and applicable law.

Will my information and data be used or shared with others?
GRAIL Inc. may use your coded information and data and specimens from which your directly identifying information has been removed for future research purposes unrelated to this study without obtaining additional consent from you. GRAIL, Inc. may also share your information, data, and specimens from which your readily identifying information has been removed with other researchers, including for-profit companies, for their own research purposes without obtaining additional consent from you. GRAIL, Inc, and other companies and institutions that receive your samples may perform genetic and other tests on them as part of the future research. Because these tests are performed for research purposes, the results generally would have no clear implications for your health or medical condition, or that of your family members, and will not be returned to you.

What Protected Health Information may be used and given to others?
The study doctor, study staff and those working for or with them, will get your personal and medical information. For example:

- Past, present, and future medical records
- Biological samples

- Research records
- Records about phone calls made as part of this research
- Records about your study visits
- Laboratory results

Who may use and share Protected Health Information about you?

- The study doctor and the study staff
- GRAIL, Inc.

Who might get your Protected Health Information?

The sponsor of this research. "Sponsor" includes GRAIL, Inc. and any persons or companies that are:

- working for or with the sponsor, or
- owned by, or affiliates of, the sponsor.
- Researchers involved in this study at other institutions
- A group that oversees the data (study information) and safety of this research

Your Protected Health Information may also be given to:

- Institutional Review Boards
- The U.S. Food and Drug Administration (FDA),
- Department of Health and Human Services (DHHS) agencies,
- The National Institutes of Health,
- Governmental agencies in other countries, and
- Governmental agencies to whom certain diseases (reportable diseases) must be reported
- Authorized researchers
- HCA Healthcare, Inc. and its affiliated entities
- Information repository locations required for the study

Why will your Protected Health Information be used and/or given to others?

- to do the research,
- to prepare and study the results, and
- to see if the research was done right.

Is your Protected Health Information still protected after it has been shared with others?

We will ask anyone who receives your Protected Health Information from us to protect your privacy; however, once your information is shared outside the institution, we cannot promise that it will remain private, and it may no longer be protected by the Privacy Rule.

The results of the study may be published in scientific journals, presented at medical meetings and data or results from the study may be added to publicly accessible databases or provided to other researchers. If the data or results of this study are made public or provided to other researchers, information that directly identifies you will not be used.

What if I decide not to give permission to use and give out my health information?
Because your health information is an important part of this study, you will not be able to participate if you do not agree to allow your health information to be used and shared as described above.

May I review or copy my information?
You will always have access to your medical record. You will not have access to your research file; however, all information contained in the research file is either information obtained directly from you, or was gathered from your medical records, to which you do have access.

May I withdraw or revoke (cancel) my permission?
Yes, but this permission will not stop automatically.

Your authorization for the use and/or disclosure of PHI, collected during your participation in this study, will be in effect indefinitely. You may withdraw or take away your permission to use and disclose your health information at any time. You can do this by sending written notice to the study doctor. If you withdraw your permission, you will not be able to stay in this study.

When you withdraw your permission, no new health information identifying you will be gathered after that date. Information that has already been gathered may still be used and given to others.

Is my health information protected after it has been given to others?
Sarah Cannon will ask anyone who receives your health information from us to protect your privacy; however, once your information is shared outside Sarah Cannon, we cannot promise that it will remain private, and it may no longer be protected by the Privacy Rule.

COMPENSATION FOR INJURY

If you believe that you are injured as a result of the research procedures being performed, please immediately contact the study doctor.

In the event that a research activity results in injury, your medical insurance may be charged for the cost of diagnosing and treating your condition. A research injury is an injury that happens as a result of taking part in this research study. If you are injured by a medical treatment or procedure that you would have received even if you weren't in the study, that is not considered a "research injury". If your private, non-governmental health insurance or health benefits program does not pay the cost of treating and diagnosing your condition, or if you have no coverage for these expenses by health insurance or health benefits programs, the cost will be paid by the Sponsor, GRAIL, Inc. if GRAIL, Inc. and the Investigator agree the injury was caused by the research or research activity as described in the protocol and not the fault of the researchers or study staff. There are no plans for payment for lost wages or other expenses. To help avoid injury, it is very important to follow all study directions.

Further information about research-related injuries is available by contacting the Institutional Review Board at 1-800-562-4789.

VOLUNTARY PARTICIPATION AND WITHDRAWAL
Your participation in this study is voluntary. You may decide not to participate or you may leave the study at any time. Your decision will not result in any penalty or loss of benefits to which you are entitled. Information and samples that have already been gathered may still be used by the study researchers, but no new information will be gathered.

Your participation in this study may be stopped at any time by the study doctor or the sponsor without your consent for any reason, including:

- if it is in your best interest
- if you do not consent to continue in the study after being told of changes in the research that may affect you
- if the clinical information collected from your medical record is insufficient, incomplete, or unable to be evaluated

SOURCE OF FUNDING FOR THE STUDY
The sponsor GRAIL, Inc. will pay for this research study.

QUESTIONS
Contact Sarah Cannon staff at 615-524-4068 or 1-833-478-7483 for any of the following reasons:

- if you have any questions about your participation in this study,
- if you feel you have had a research-related injury, or
- if you have questions, concerns or complaints about the research.

If you have questions about your rights as a research subject or if you have questions, concerns or complaints about the research, you may contact:

Western Institutional Review Board® (WIRB®)
1019 39th Avenue SE Suite 120
Puyallup, Washington 98374-2115
Telephone: 1-800-562-4789 or 360-252-2500
E-mail: Help@wirb.com

Western IRB has approved the information in this consent form and has given approval for the study doctor to do the study.

If you do not want to talk to the study doctor or study staff, if you have concerns or complaints about the research, or to ask questions about your rights as a study subject you may contact Western IRB.

Do not sign this consent form unless you have had a chance to ask questions and have received satisfactory answers.

If you agree to be in this study, you will receive a signed and dated copy of this consent form for your records.

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.

CONSENT
I have read this consent form (or it has been read to me). All my questions about the study and my part in it have been answered. I freely consent to be in this research study.

I authorize the release of my medical and research records for the purpose of this study.

_____
Subject Name (printed)

_____ _____
Signature of Subject Date