Are you participating in any other research studies? _____ Yes _____No

PURPOSE OF RESEARCH

You are invited to participate in a research study on factors affecting breast cancer treatment decisions. Women diagnosed with breast cancer face important decisions about how to treat the affected breast, as well as whether or not to remove the unaffected breast. In our research study, funded by the National Cancer Institute, we will be examining a variety of factors that may contribute to these treatment decisions, such as emotion and brain function. We would like to better understand how women think and feel as they are deciding on their cancer treatment. The results of this study may help provide enhanced decision support during this stressful and crucial period of breast cancer treatment. You were selected as a possible participant in this study because either you have recently been diagnosed with breast cancer or you are a woman who does not have cancer. You may have also volunteered to be a pilot participant, meaning to help test out sections or all of the study protocol.

This research study will enroll up to 185 women, 140 who have been recently diagnosed with breast cancer and 45 who have no cancer diagnosis. The enrollment will occur in United States.

VOLUNTARY PARTICIPATION

Your participation in this study is entirely voluntary. Your decision not to participate will not have any negative effect on you or your medical care. You can decide to participate now, but withdraw your consent later and discontinue the study without any loss of benefits or medical care to which you are entitled.

DURATION OF STUDY INVOLVEMENT

This research study is expected to take approximately five years, 4.5 years for collection of data and about 6 months for data analysis and publishing the results. Each participant will be asked to complete approximately 8 hours of assessments at baseline (at the time of study enrollment) and 2 hours of research participation at 6, 12, and 18 month follow-ups. Please see the summary table below.

PROCEDURES

If you choose to participate, Drs. Spiegel, Etkin, Gross or Kurian and their research study staff will review the study procedures with you and will answer any questions you may have. The table below contains a summary of the procedures involved and approximate time involvement for each.

Procedures After Study Enrollment	Baseline (Online/at home, 1 to 3 Stanford Visits) Total: 8 hours	6 Month Follow-up (Online/at home) Total: 2 hours	12 Month Follow-up (Online/at home) Total: 2 hours	18 Month Follow-up (Online/at home) Total: 2 hours
Questionnaires 2 hours (Online/at home/Stanford)	♦	♦	♦	♦
Saliva sample 1 hour (15 min at Follow-Up) (At home)	♦	♦	♦	♦
fMRI Brain Scan and Related Tasks 3.5 hours (Stanford)	♦			
Behavioral Tasks 1.5 hours (Stanford)	♦			

Questionnaires The questionnaires will take approximately 2 hours to complete. Most of them are online and can be completed at home and a few on paper. You will be asked questions about events in your life, your social support, your current emotions and ways of responding to them, your ways of coping with cancer, and your level of stress. You can refuse to answer any individual questions, however, some answers are necessary for study participation.

Risks: Answering questions on some of the questionnaires used in this study may provoke mild feelings of frustration, fatigue, sadness or anxiety. You have the right to refuse to answer any question that makes you feel uncomfortable on any of the questionnaires. Information you provide will remain confidential and will be used only for the purposes of the research study.

Saliva sample collection The saliva sample collection will be done at your home and will take approximately 1 hour total, over the course of 3 days. We will ask you to collect 3 saliva samples a day (upon awakening, 30 minutes later, and in the evening) for 3 consecutive days (1 day at follow-ups, taking a total of approximately 15 minutes). You will be asked NOT to eat or drink anything, including water, 30 minutes prior to your saliva collection. To collect the saliva samples, we will ask you to put a cotton swab in your mouth until it is saturated with saliva.

Due to the restrictions during the Covid-19 pandemic, the participants who have their follow-ups due during that period will not be asked to provide saliva samples.

Blood sample One tube of blood (less than 1.5 tablespoons) will be collected and stored for possible future testing.

Risks: The risks associated with saliva collection are none. The risks of blood sample collection are slight discomfort or bruising from the blood draw.

fMRI Related Tasks

Functional Magnetic Resonance Imaging (fMRI) scans of the head

This test will be done at Stanford and will take about 3.5 hours (1hour preparation, 2 hours in the scanner, 30 minutes debreifing). In this part of the study, we will use functional magnetic resonance imaging of brain activity (a non-invasive scan without contrast) during emotion-related tasks. We will be showing pictures, and these pictures may elicit a range of emotions from none at all to potentially strong emotion. The scan creates a functional image of blood flow during brain activity, indicating specific brain regions involved in thinking and feeling. During this task, we may also record your breathing with respiration bands and your heart rate by placing electrodes on the upper chest area. A pulse oximeter will be placed on one of your fingers to measure your heart rate by measuring the changes in blood volume in your skin. The fMRI related tasks will provide important information regarding the decision making process that cannot be captured by questionnaires alone. You are, of course, free to terminate your participation in this task at any time.

The MRI scan uses a magnet to make images (pictures) of the brain. The MRI scan involves lying on a table, then being slid into a large tunnel. Your head and shoulders lie in a plastic rounded tray, which makes it more comfortable and easier to lie still. For most, the hardest part of the scan is the need to lie still for this amount of time (2 hours).

You will hear repetitive tapping noises from the scanner as it collects the data that makes the images. You will be required to wear earplugs or headphones, which will be provided. The space within the large magnet in which you lie is somewhat confined, although we have taken many steps to help you feel as comfortable as possible.

As MRI may involve risks to you (or the embryo or fetus, if you become pregnant), which are currently unforeseeable, if you are pregnant, you may not participate in this study. Therefore, we may ask you to have a urine pregnancy test before the MRI procedure to make sure that you are not pregnant.

Risks: Magnetic fields do not cause harmful effects at the levels used in the MRI machine. However, the MR scanner uses a very strong magnet that will attract some metals and affect some electronic devices. If you have a cardiac pacemaker

or any other biomedical device in or on your body, it is very important that you inform the operator/investigator immediately. As metallic objects may experience a strong attraction to the magnet, it is also very important that you notify the operator of any metal objects (especially surgical clips), devices, or implants that are in or on your body before entering the magnet room. All such objects must be removed (if possible) before entering the magnet room. In some cases, having those devices means you should not have an MRI scan performed. In addition, watches, credit cards, and hearing aids should also be removed as these could be damaged. You will be provided a way to secure these items. If you have any history of head or eye injury involving metal fragments, if you have ever worked in a metal shop, or if you could be pregnant, you should notify the operator/investigator.

If you have kidney problems, please tell the operator. You should also notify the operator/investigator if you have any tattoos on your body, including eyeliner and other permanent makeup. Tattoos could become warm and irritated during the scan and remain so for several days. If you would prefer not to participate in the MR scan due to the presence of tattoos on your body, please inform a research team member.

There is a possibility that you will experience a localized twitching sensation due to the magnetic field changes during the scan. This is expected and should not be painful. Please notify the researchers scanning you to stop the scan if you experience this sensation.

Some of the radio frequency imaging coils, imaging software and devices being used in your scan are not approved by the FDA but are similar to counterparts that have been approved by the FDA. There is a small risk of heating from all cables and devices. Please report any heating sensation immediately.

Dizziness or nausea may occur if you move your head rapidly within the magnet.

The MRI scanner makes loud, periodic sounds that can cause hearing damage. With earplugs or ear protection properly worn, there is no known risk of permanent hearing damage. Rarely, your hearing may be less sensitive for several days after an MRI scan, but if this happens your hearing should return to normal within a few days. MRI sounds could cause ringing in the ears or aggravate any underlying ear conditions like tinnitus (undiagnosed or diagnosed).

IF YOU FEEL DISCOMFORT AT ANY TIME, NOTIFY THE OPERATOR AND YOU CAN DISCONTINUE THE EXAM AT ANY TIME.

The scans performed in this study are for specific research purposes and are not optimized to find medical abnormalities. The investigators for this project may not

be trained to perform medical diagnosis. The investigators and Stanford are not responsible for failure to find existing abnormalities with these MRI scans. However, on occasion, the investigator may notice a finding on an MRI scan that seems abnormal. When this occurs, a physician will be consulted as to whether the findings merit further investigation, in which case the investigator will contact you and your primary care physician and inform you of the finding. The decision as to whether to proceed with further examination or treatment lies solely with you and your physician. The investigators, the consulting physician, and Stanford are not responsible for any examination or treatment that you undertake based on these findings. Because the images collected in this study may not comprise a proper clinical MRI scan, these images will not be made available for diagnostic purposes.

Behavioral Tasks The behavioral tasks will take approximately 1.5 hours to complete. They will be completed in person, at our office, with an experimenter. Each of the behavioral tasks is computerized and involves responding to various graphics, words, and/or letters. Your responses and reaction times will be recorded. Most task stimuli are neutral (e.g., balloons, letters) and some stimuli are emotion words (e.g., "sad"). The tasks are designed to assess various cognitive and psychological processes, including attentional control, memory, decision-making, and self-perceptions. You will have the opportunity to earn small bonus payments based on your performance on some of these tasks.

Risks: Exposure to emotion-related words may elicit mild feelings of that emotion (e.g., seeing the word "sad" may evoke mild feelings of sadness). Most tasks are repetitive and therefore may elicit mild feelings of boredom or frustration.

Medical Records We will access your medical records to obtain information about your health status.

After completing your active participation in the study We will continue to follow your medical records to record any diagnosis and treatment that you receive for cancer or other health conditions and to record your health status. We may also contact you periodically to confirm this information, and answer any questions you may have regarding the progress of this study.

Women of Childbearing Potential

If you are a woman who is able to become pregnant, it is expected that you will use an effective method of birth control to prevent exposing a fetus to a potentially dangerous agent with unknown risk. If you are pregnant, you may not participate in this study. You understand that if you are pregnant or if you become pregnant, you or your child may be exposed to an unknown risk.

Tissue Sampling for Research

Research using tissues (e.g. saliva, blood) is an important way to try to understand human disease. You have been given this information because the investigators want to include your tissues in a research project and because they want to save the samples for future research. There are several things you should know before allowing your tissues to be studied.

- Your tissues will be stored under a unique code number; the code number will be linked to your name but only known in a secure manner to the study Coordinators or Investigators involved in the study.
- You have the right to refuse to allow your tissues to be studied now or saved for future study.
- The results of the study of your samples will be used for research purposes only and you will not be told the results of the tests.

_____ I consent to my samples being saved for future research

_____ I do not consent to my samples being saved for future research

Tissue Sampling for Genetic Testing

As part of the analysis on your blood and/or saliva samples, the investigators may do genetic testing on your saved samples. Genetic research includes the study of gene characteristics and gene versions that are transmitted by parents to children. Genetic research may include looking at information, such as personal appearance and biochemistry, gene sequences, genetic landmarks, individual and family medical histories, reactions to medications, and responses to treatment. Genetic research raises certain questions about informing you of any results. Possible risks of knowing results include anxiety, other psychological distress, and the possibility of insurance and job discrimination. A possible risk of not knowing includes being unaware of the need for treatment. These risks can change depending on the results of the research and whether there is a treatment or cure for a particular disease.

Sometimes patients have been required to furnish information from genetic testing for health insurance, life insurance, and/or a job. A Federal law, the Genetic Information Nondiscrimination Act of 2008 (GINA), generally makes it illegal for health insurance companies, group health plans, and employers with 15 or more employees to discriminate against you based on your genetic information.

Information from analyses of your coded samples and your coded medical information will be put into one of the National Institutes of Health (NIH) databases

along with information from the other research participants and will be used for future research. These databases will be accessible by the Internet. Only anonymous information from the analyses will be put in a completely public database, available to anyone on the Internet.

No traditionally-used identifying information about you, such as your name, address, telephone number, or social security number, will be put into the public database. While the public database will not contain information that is traditionally used to identify you, people may develop ways in the future that would allow someone to link your genetic or medical information in our databases back to you. For example, someone could compare information in our databases with information from you (or a blood relative) in another database and be able to identify you (or your blood relative). It also is possible that there could be violations to the security of the computer systems used to store the codes linking your genetic and medical information to you.

However, your privacy is very important to us and we will use safety measures to protect it. Despite all of the safety measures that we will use, we cannot guarantee that your identity will never become known.

PARTICIPANT RESPONSIBILITIES

As a participant, your responsibilities include:

- Following the instructions of the Protocol Director and study staff.
- Contacting the Protocol Director or research study staff as soon as possible if you will need to reschedule an appointment.
- Telling the Protocol Director or research staff if you believe you might be pregnant.
- Completing the questionnaires as instructed.
- Asking questions as you think of them.
- Telling the Protocol Director or research staff if you change your mind about staying in the study.

WITHDRAWAL FROM STUDY

If you first agree to participate and then you change your mind, you are free to withdraw your consent and discontinue your participation at any time. Your decision will not affect your ability to receive medical care for your disease and you will not lose any benefits to which you would otherwise be entitled.

If you decide to withdraw your consent to participate in this study, you should notify [redacted] at ([redacted]).

The Protocol Director may also withdraw you from the study, without your consent for one or more of the following reasons:

- Failure to follow the instructions of the Protocol Director or study staff.
- The Protocol Director decides that continuing your participation could be harmful to you.
- Pregnancy.
- You need treatment not allowed in the study.
- The study is cancelled.
- Other administrative reasons.
- Unanticipated circumstances.
- If you are found ineligible after intake

POSSIBLE RISKS, DISCOMFORTS, AND INCONVENIENCES

There are risks, discomforts, and inconveniences associated with any research study. These deserve careful thought. You should talk with the Protocol Director if you have any questions. The specific risks associated with each procedure are described above in the Procedures section.

POTENTIAL BENEFITS

This research is unlikely to be of direct benefit to you and is geared more towards helping women with breast cancer in the future.

We cannot and do not guarantee or promise that you will receive any benefits from this study.

ALTERNATIVES

The only alternative to participating in this study is not participating in this study.

PARTICIPANT'S RIGHTS

You should not feel obligated to agree to participate. Your questions should be answered clearly and to your satisfaction. If you decide not to participate, tell the Protocol Director.

You will be told of any important new information that is learned during the course of this research study, which might affect your condition or your willingness to continue participation in this study.

ClinicalTrials.gov

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.

CONFIDENTIALITY

Your identity will be kept as confidential as possible as required by law. Your personal health information related to this study may be disclosed as authorized by you. Your research records may be disclosed outside of Stanford, but in this case, only a unique code number will identify you. Information about the code will be kept in a secure location and access limited to research study personnel.

Certain scientific journals also require that data used in a published study be contributed in an anonymous, de-identified form to a scientific database. If this is required, all identifying personal information will be removed before it is added to the database.

Brain images are stripped of all identifying characteristics, such as facial features, before submission to an imaging database.

Patient information may be provided to Federal and regulatory agencies as required. The Food and Drug Administration, for example, may inspect research records and learn your identity if this study falls within its jurisdiction.

Certificate of Confidentiality

This research is covered by a Certificate of Confidentiality from the National Institutes of Health. The researchers with this Certificate may not disclose or use information, documents, or biospecimens that may identify you in any federal, state, or local civil, criminal, administrative, legislative, or other action, suit, or proceeding, or be used as evidence, for example, if there is a court subpoena, unless you have consented for this use. Information, documents, or biospecimens protected by this Certificate cannot be disclosed to anyone else who is not connected with the research except, if there is a federal, state, or local law that requires disclosure (such as to report child abuse or communicable diseases but not for federal, state, or local civil, criminal, administrative, legislative, or other proceedings, see below); if you have consented to the disclosure, including for your medical treatment; or if it is used for other scientific research, as allowed by federal regulations protecting research subjects.

The Certificate cannot be used to refuse a request for information from personnel of the United States federal or state government agency sponsoring the project that is needed for auditing or program evaluation by the National Cancer Institute, which is funding this project or for information that must be disclosed in order to meet the requirements of the federal Food and Drug Administration (FDA). You should understand that a Certificate of Confidentiality does not prevent you from

voluntarily releasing information about yourself or your involvement in this research. If you want your research information released to an insurer, medical care provider, or any other person not connected with the research, you must provide consent to allow the researchers to release it.

Authorization To Use Your Health Information For Research Purposes

Because information about you and your health is personal and private, it generally cannot be used in this research study without your written authorization. If you sign this form, it will provide that authorization. The form is intended to inform you about how your health information will be used or disclosed in the study. Your information will only be used in accordance with this authorization form and the informed consent form and as required or allowed by law. Please read it carefully before signing it.

What is the purpose of this research study and how will my health information be utilized in the study?

The purpose of this study is to learn more about the factors that contribute to breast cancer treatment decisions, including emotions, thoughts, and related brain function. Knowledge gained from this study may help us develop possible new interventions to better assist women newly diagnosed with breast cancer with their treatment decisions. Your health information will be kept in secure settings so that only Stanford researchers will have access to any identifying information. This allows us to be certain that your identifying information is linked to the data acquired from you in this study. If this research leads to scientific publications, any and all identifying information will be removed.

Do I have to sign this authorization form?

You do not have to sign this authorization form. But if you do not, you will not be able to participate in this research study. Signing the form is not a condition for receiving any medical care outside the study.

If I sign, can I revoke it or withdraw from the research later?

If you decide to participate, you are free to withdraw your authorization regarding the use and disclosure of your health information (and to discontinue any other participation in the study) at any time. After any revocation, your health information will no longer be used or disclosed in the study, except to the extent that the law allows us to continue

using your information (e.g., necessary to maintain integrity of research). If you wish to revoke your authorization for the research use or disclosure of your health information in this study, you must write to: David Spiegel, M.D., 401 Quarry Road, Office 2325, Stanford, CA 94305-5718.

What Personal Information Will Be Obtained, Used or Disclosed?
Your health information related to this study, may be used or disclosed in connection with this research study, including, but not limited to, Clinical, neurocognitive, behavioral, magnetic resonance imaging (MRI), psychophysiological (including heart rate, respiration, pupil size, eye tracking, skin conductance), and combinations of the above.

Who May Use or Disclose the Information?
The following parties are authorized to use and/or disclose your health information in connection with this research study:

- David Spiegel, M.D.; James Gross, Ph.D., Amit Etkin, M.D., Ph.D., Allison Kurian, M.D. (Protocol Directors)
- The Stanford University Administrative Panel on Human Subjects in Medical Research and any other unit of Stanford University as necessary
- Research Staff

Who May Receive or Use the Information?
The parties listed in the preceding paragraph may disclose your health information to the following persons and organizations for their use in connection with this research study:

- The Office for Human Research Protections in the U.S. Department of Health and Human Services
- National Cancer Institute (NCI)
- Brain Resource Limited
    - Brain Resource Limited is the producer of WebNeuro, one of the Behavioral Task assessments. They will obtain the de-identified data collected during this assessment. This data will be only linked to your study generated identification number and age (not date of birth). Brain

Resource Limited will use this data to provide this project with the necessary data analysis of the collected data.

Your information may be re-disclosed by the recipients described above, if they are not required by law to protect the privacy of the information.

When will my authorization expire?
Your authorization for the use and/or disclosure of your health information will end on 12/31/2030 or when the research project ends, whichever is earlier.

Will access to my medical record be limited during the study?
To maintain the integrity of this research study, you may not have access to any health information developed as part of this study until it is completed. At that point, you would have access to such health information if it was used to make a medical or billing decision about you (e.g., if included in your official medical record).

_____ _____
Signature of Adult Participant Date

_____
Print Name of Adult Participant

FINANCIAL CONSIDERATIONS

Payment Research participants will be offered $250 for completion of all baseline assessments and $100 after completion of the assessments at each follow-up, at 6, 12, and 18 months. Each participant will be offered a total of $550 for study completion.

Due to shelter in place restriction during the Covid-19 pandemic, the participants who have their follow-ups due during that period will receive an additional $30 for completing their online questionnaires one additional time for that particular follow-up.

Payments may only be made to U.S. citizens, legal resident aliens, and those who have a work eligible visa. You may need to provide your social security number to receive payment.

Costs There will be no costs to you for any of the treatment or testing done as part of this research study.

Sponsor The National Cancer Institute (NCI) is providing financial support for the study. The National Institutes of Health are providing some financial support for the facility and staff where part or all of the study is taking place.

COMPENSATION for Research-Related Injury

All forms of medical diagnosis and treatment – whether routine or experimental – involve some risk of injury. In spite of all precautions, you might develop medical complications from participating in this study. If such complications arise, the Protocol Director and the research study staff will assist you in obtaining appropriate medical treatment. In the event that you have an injury or illness that is directly caused by your participation in this study, reimbursement for all related costs of care first will be sought from your insurer, managed care plan, or other benefits program. **You will be responsible for any associated co-payments or deductibles as required by your insurance.**

If costs of care related to such an injury are not covered by your insurer, managed care plan or other benefits program, you may be responsible for these costs. If you are unable to pay for such costs, the Protocol Director will assist you in applying for supplemental benefits and explain how to apply for patient financial assistance from the hospital.

You do not waive any liability rights for personal injury by signing this form.

CONTACT INFORMATION

Questions, Concerns, Complaints: If you have any questions, concerns or complaints about this research study, its procedures, risks and benefits, or alternative courses of treatment, you should ask the principal investigator, Dr. Spiegel at (xxx)-xxx-xxxx or dspiegel@stanford.edu. You should also contact him at any time if you feel you have been hurt by being a part of this study.

Independent Contact: If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the Stanford Institutional Review Board (IRB) to speak to someone independent of the research team at ([redacted] or toll free at [redacted]. You can also write to the Stanford IRB, Stanford University, El Camino Real, Palo Alto, CA 94306.

EXPERIMENTAL SUBJECT'S BILL OF RIGHTS

As a research participant you have the following rights. These rights include but are not limited to the participant's right to:

- be informed of the nature and purpose of the experiment;
- be given an explanation of the procedures to be followed in the medical experiment, and any drug or device to be utilized;
- be given a description of any attendant discomforts and risks reasonably to be expected;
- be given an explanation of any benefits to the subject reasonably to be expected, if applicable;
- be given a disclosure of any appropriate alternatives, drugs or devices that might be advantageous to the subject, their relative risks and benefits;
- be informed of the avenues of medical treatment, if any available to the subject after the experiment if complications should arise;
- be given an opportunity to ask questions concerning the experiment or the procedures involved;
- be instructed that consent to participate in the medical experiment may be withdrawn at any time and the subject may discontinue participation without prejudice;
- be given a copy of the signed and dated consent form; and
- be given the opportunity to decide to consent or not to consent to a medical experiment without the intervention of any element of force, fraud, deceit, duress, coercion or undue influence on the subject's decision.

May we contact you about future studies that may be of interest to you?
____ Yes ____ No

Signing your name means you agree to be in this study and that you will receive a copy of this signed and dated consent form.

_____ _____
Signature of Adult Participant Date

_____
Print Name of Adult Participant

_____ _____
Signature of Person Obtaining Consent Date

_____
Print Name of Person Obtaining Consent

Participant ID:

STUDY