INFORMED CONSENT FORM

Official title: Evaluation of LS301 Uptake in Tumors of Patients Undergoing Partial Mastectomy and Sentinel Lymph Node Biopsy for Breast Cancer

NCT number: NCT02807597

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Title of Study: Evaluation of LS301 Uptake in Tumors of Patients Undergoing Partial Mastectomy and Sentinel Lymph Node Biopsy for Breast Cancer

Consent to be part of a Research Study
To be conducted at
The University of Texas Southwestern Medical Center

Key Information about this Study

The purpose of this research study is to look at how an imaging agent called LS301 works in your body when injected prior to surgery.

When you enroll in this study, you will receive doses of LS301 until the safest and best tolerated dose is reached. LS301 is given via I.V. infusion 4-24 hours prior to surgery in the clinic at the University of Texas Southwestern Medical Center. The dose of LS301 you receive will depend on when you enroll in the study and the side effects that the people who enrolled before you experienced. You will be monitored for approximately one hour after injection for any side effects that might be related to LS301. After that time period is up, you may remain in the hospital for your surgery or you may go home and return the next day for your surgery. You will have tests, exams and procedures that are part of your standard care and for study purposes.

There are risks to this imaging agent that are described in this document. Some risks include dizziness, fever, changes in liver enzymes, and nausea.

Information about this form

You may be eligible to take part in a research study. This form gives you important information about the study.

Please take time to review this information carefully. You should talk to the researchers about the study and ask them any questions you have. You may also wish to talk to others (for example, your friends, family, or a doctor) about your participation in this study. If you decide to take part in the study, you will be asked to sign this form. Before you sign this form, be sure you understand what the study is about, including the risks and possible benefits to you.

Please tell the researchers or study staff if you are taking part in another research study.

Your doctor is a research investigator in this study. S/he is interested in both your medical care and the conduct of this research study. At any time, you may discuss your care with another doctor who is not part of this research study. You do not have to take part in any research study offered by your doctor.

Voluntary Participation - You do not have to participate if you don't want to. You may also leave the study at any time. If you decide to stop taking part in this research study, it will not affect your relationship with the UT Southwestern staff or doctors. Whether you participate or not will have no effect on your legal rights or the quality of your health care.

If you are a medical student, fellow, faculty, or staff at the Medical Center, your status will not be affected in any way.

General Information – "Who is conducting this research?"

Principal Investigator

The Principal Investigator (PI) is the researcher directing this study; the PI is responsible for protecting your rights, safety and welfare as a participant in the research. The PI for this study is Deborah Farr, M.D. Department of Surgery at the University of Texas Southwestern Medical Center.

Funding

The University of Texas, Department of Surgery, is funding this study. The department designed the study, drafted the study plan and is providing money so that the researchers can conduct the study.

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Purpose – "Why is this study being done?"

The purpose of this research study is to look at how a substance called LS301 works in your body when injected prior to surgery. LS301 is a substance developed at Washington University School of Medicine that acts as a dye or an imaging agent. It accumulates in cancer-containing tissue and not in normal tissue, and it fluoresces under near-infrared light. This means that researchers can use special goggles that function under near-infrared light to distinguish between normal tissue and tumor tissue. This study is evaluating the extent to which LS301 can be found in cancerous tissue and not normal tissue by injecting you with LS301 before surgery and then looking at samples of tissue taken during your routine surgery to see whether the information created by viewing the samples with the goggles matches the results of the routine evaluation of your samples by a pathologist. We will also be looking at any side effects that occur that might be related to LS301. It is important to note that your surgical plan and further treatment will not be altered due to your participation in this study.

LS301 is considered investigational, which means that it has not been approved by the U.S. Food and Drug Administration (FDA). Additionally, the goggles are considered investigational by the FDA.

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.

Information about Study Participants – "Who is participating in this research?"

You are being asked to be a participant in this study because you have breast cancer.

How many people are expected to take part in this study?
This study will enroll approximately 9 study participants.

How long will I be in this study?
If you agree to take part in this study, your involvement will last for about a day (from the time of LS301 injection to the end of surgery).

Information about Study Procedures – "What will be done if you decide to be in the research?"

Screening – After you sign this consent to participate, exams, tests, and/or procedures may be done as described below to find out if you can continue in the study; this is called screening. We may be able to use the results of exams, tests, and/or procedures you completed before enrolling in this study. You will be told which results we will obtain and which procedures will not have to be repeated. Many of the procedures are described below as "**standard care**" and would be done even if you do not take part in this research study. You will be told which ones are for "**research only**".

Screening Procedures

- Physical examination – We will collect information regarding your height, weight and body mass index (BMI)
- Demographic information – We will collect information such as your age, sex, race and ethnicity.
- Medical History – We will collect information about your medical history including any medications you are taking including prescription or over-the-counter drugs, vitamins or herbs.
- Pregnancy Test – If you are capable of becoming pregnant, a pregnancy test will also be done before you receive study treatment.

The results of the screening exams, tests, and/or procedures will be reviewed to determine whether you will be allowed to continue in the study. If you are not allowed to continue in the study, the researcher will discuss the reasons with you and will discuss other possible options.

Study Procedures - as a participant, you will undergo the following procedures:
Between 4 and 24 hours before your scheduled surgery, the LS301 will be administered. It will be given as an intravenous injection (by a needle through a vein in your arm). The dose of LS301 you receive will depend on when you enroll in the study and the side effects that the people who enrolled before you experienced. You will be monitored for approximately one hour after injection for any side effects that might be related to LS301. After that time period is up, you may remain in the hospital for your surgery or you may go home and return the next day for your surgery.

The safety monitoring will consist of the following procedures at the following time points:

- Assessment of your vital signs (heart rate, blood pressure, respiratory rate, and body temperature) at 30 minutes before the LS301 injection, 30 minutes and 60 minutes after the injection, and before surgery
- Blood draw (approximately 1 tablespoon at each time point) to check your blood counts and organ function at 30 minutes before the LS301 injection, 60 minutes after the injection, and approximately one hour before surgery; the results from any routine blood tests that you have for up to 30 days after the injection will also be reviewed
- Collection of a urine sample for a urinalysis to check your organ function at 30 minutes before the LS301 injection, 60 minutes after the injection, and approximately one hour before surgery
- Electrocardiogram (ECG) to check how your heart is functioning at 30 minutes before the LS301 injection and again 5-10 minutes and 60 minutes after the injection; this test involves putting sticky pads on your skin while the electoral activity of your heart is recorded

During your surgery, the study team member will wear the special goggles that will allow them to look for the fluorescence of the LS301. These goggles will not interfere with the routine surgical procedure. Before removing any tissues, the study team member will use near-infrared light to look for fluorescence with the goggles. The study doctor will then perform the surgery as planned. After the tissue has been removed, the goggles will be used again to look for any fluorescence at the edges of the tissue that was removed and also at the site of the surgery. Findings with the goggles will be recorded but will not change how the surgery is performed. A pathologist will then evaluate the tissue in the standard way, and the pathologic results will be compared to the view while using the goggles. A small piece of the tissue that was removed will be saved for research testing.

Could your participation end early?
There are several reasons why the researchers may need to end your participation in the study (early withdrawal). Some reasons are:

- The researcher believes that it is not in your best interest to stay in the study.
- You become ineligible to participate
- You become pregnant
- Your condition changes and you need treatment that is not allowed while you are taking part in the study.
- You do not follow instructions from the researchers.
- You withdraw your consent to participate
- The study is stopped.

Risks – "What are the risks of participation in the research?"
You may experience one or more of the risks indicated below from being in this study. In addition to these, there may be other unknown risks, or risks that we did not anticipate, associated with being in this study.

Some risks described in this consent document, if severe, may cause death.

Risks of LS301
LS301 is not known to cause any adverse effects, but it has not yet been tested in people. However, it is possible that some patients may experience mild reactions similar to those they might experience if given a different kind of imaging agent called OctreoScan, such as dizziness, fever, changes in liver enzymes, and nausea.

Risks of Goggle System
The fluorescence goggle imaging system uses safe, non-laser, invisible near-infrared wavelengths well below the US FDA limit for near-infrared exposure. It is equivalent to the current near-infrared dose emitted from the standard 5-lantern surgical lights commonly used in the operating room.

Risks of Blood Draw
Possible side effects from a blood draw include fainting, dizziness, pain, swelling, bruising, or bleeding where the needle is inserted. There is also a slight possibility of infection where the needle is inserted.

Risks of ECG
An ECG is considered a non-invasive test. Skin irritation from the ECG electrodes or pain when removing the electrodes is a possible risk. Also, you may experience discomfort from lying quietly for a long time.

Risk of Breach of Confidentiality
One risk of participating in this study is that confidential information about you may be accidentally disclosed. We will use our best efforts to keep the information about you secure. Please see the section in this consent form titled "**Confidentiality – How will** your **records be kept confidential?**?" for more information.

Are there Risks related to withdrawing from the study?
If you decide to withdraw from this study early, please discuss your decision with the principal investigator. The researcher may ask you to complete study withdrawal procedures at a final study visit. There is no risk to you if you do not complete the final withdrawal procedures and you can choose not to participate in them.

Reproductive Risks

Concerns for sexually active women: You should not become pregnant while taking part in this study because we do not know how the LS301 and procedures could affect a fetus, if a woman becomes pregnant during the study. It is important that you talk to your study doctor about avoiding pregnancy during this study. If you think you might have become pregnant while you are in this study, you must tell one of the study doctors right away so that management of the pregnancy and the possibility of stopping the study can be discussed.

If you are a woman who is pregnant or could be pregnant, you cannot take part in this study because we do not know how the LS301 and procedures might affect a developing fetus. We will do a pregnancy test before you start treatment to make sure you are not pregnant.

Risks to babies who are being breastfed: Women who are breastfeeding cannot take part in this study because we do not know what effect the imaging agent and procedures might have on their breast milk.

Are there risks if you also participate in other research studies?
Being in more than one research study at the same time, or even at different times, may increase the risk to you. It may also affect the results of the studies. You should not take part in any other study where you will be receiving investigational agents.

What if a research-related injury occurs?
The researchers have taken steps to minimize the known or expected risks. However, you may still experience problems or side effects, even though the researchers are careful to avoid them. In the event of a research-related injury or if you experience an adverse reaction, please immediately contact your study doctor. See the section "Contact Information" for phone numbers and additional information. You may also need to tell your regular doctors.

If you are injured or made sick from taking part in this research study, medical care will be provided. This care may be billed to you or your insurance. Depending on the circumstances, this care may be provided at no cost to you. We have no plans to give you money if you are injured. The investigator can provide you with more information.

If you sign this form, you do not give up your right to seek additional compensation if you are harmed as a result of being in this study.

Benefits – "How could you or others benefit from your taking part in this study?"
You will not benefit from being in this study.

However, we hope that, in the future, other people might benefit from this study because it will help investigators learn more about using LS301 in conjunction with the goggle system in an effort to reduce the incidence of incomplete removal of cancerous tissue and the need for follow-up surgery.

Alternative procedures or course of treatment – "What other options are there to participation in this study?"
There are other options available to you. Please talk to researchers about these options.

Costs – Will taking part in this study cost anything?
You or your health insurance company will be responsible for the cost of treatments and procedures that would be done whether or not you took part in this study. It is important to understand that some insurance companies do not cover some costs (for example, approved drugs used in a way different from the package instructions). If your insurance company does not cover these treatments or procedures, you will be required to pay for them. Ask the researchers if you have any questions about what it will cost you to take part in this study (for example bills, fees, or other costs related to the research).

Confidentiality – How will your records be kept confidential?
Information we learn about you in this study will be handled in a confidential manner, within the limits of the law. If we publish the results of the study in a scientific journal or book, we will not identify you. The Institutional Review Board and other groups that have the responsibility of monitoring research may want to see study records which identify you as a subject in this study.

How will my information and/or tissue samples be used?
With appropriate permissions, your samples and collected information may also be shared with other researchers here, around the world, and with companies.

By agreeing to participate in this study, your information or tissue samples could be used for future research studies or sent to other investigators for future research studies without additional consent from you. The information that identifies you will first be removed from your information or tissue samples. If you do not want your information or tissue samples to be used for future research studies without your consent, you should not participate in this study.

Research policies require that private information about you be protected and this is especially true for your health information. However, the law sometimes allows or requires others to see your information. The information given below describes how your privacy and the confidentiality of your research records will be protected in this study.

Medical information collected during this study and the results of any test or procedure that may affect your medical care may be included in your medical record. The information included in your medical record will be available to health care providers and authorized persons including your insurance company.

Some of the research being done in the future may include genetic research. Genetic research can look at DNA to look for mutations (changes) that may increase the risk of disease or affect the way a person responds to treatment. This could include the database of Genotypes and Phenotypes (dbGaP), which is a repository that shares genomic data. The data within dbGaP remains anonymous, but de-identification of data cannot eliminate a risk of disclosure, which could affect you and even your family members.

What is Protected Health Information (PHI)?
Protected Health Information is information about a person's health that includes information that would make it possible to figure out whose it is. According to the law, you have the right to decide who can see your protected health information. If you choose to take part in this study, you will be giving your permission to the investigators and the research study staff (individuals carrying out the study) to see and use your health information for this research study. In carrying out this research, the health information we will see and use about you will include:

- Demographic information: age, sex, race, ethnicity
- Height, weight, and body mass index (BMI)
- Medical history and concomitant medications

We will get this information by asking you.

How will your PHI be shared?
Because this is a research study, we will be unable to keep your PHI completely confidential. We may share your health information with people and groups involved in overseeing this research study including:

- the Sponsor, The University of Texas Department of Surgery funding the study. The sponsor includes any people, entities, groups or companies working for or with the sponsor or owned by the sponsor. The sponsor will receive written reports about your participation in the research. The sponsor may look at your health information to assure the quality of the information used in the research.
- the following collaborators at other institutions that are involved with the study: Washington University
- the committee that checks the study data on an ongoing basis, to determine if the study should be stopped for any reason.
- the members of the local research team.
- The Institutional Review Board, Human Research Protection Program Office and the Compliance Office of the University of Texas Southwestern Medical Center, and other groups that oversee how research studies are carried out.
- The Research offices at the University of Texas Southwestern Medical Center
- the Food and Drug Administration (FDA) and other U.S. and international governmental regulatory agencies involved in overseeing drug or device research.
- Representatives of domestic and foreign governmental and regulatory agencies may be granted direct access to your health information for oversight, compliance activities, and determination of approval for new medicines, devices, or procedures.

If you decide to participate in this study, you will be giving your permission for the groups named above, to collect, use and share your health information. If you choose not to let these groups collect, use and share your health information as explained above, you will not be able to participate in the research study.

Parts of your PHI may be photocopied and sent to a central location or it may be transmitted electronically, such as by e-mail or fax. The groups receiving your health information may not be obligated to keep it private. They may pass information on to other groups or individuals not named here.

How will your PHI be protected?
In an effort to protect your privacy, the study staff will use code numbers instead of your name, to identify your health information. Initials and numbers will be used on any photocopies of your study records, and other study materials containing health information that are sent outside of the University of Texas Southwestern Medical Center for review or testing. If the results of this study are reported in medical journals or at meetings, you will not be identified.

Do you have to allow the use of your health information?
You do not have to allow (authorize) the researchers and other groups to see and share your health information. If you choose not to let the researchers and other groups use your health information, there will be no penalties but you will not be allowed to participate in the study.
After you enroll in this study, you may ask the researchers to stop using your health information at any time . However, you need to say this in writing and send your letter to

Deborah Farr, M.D.
5323 Harry Hines Boulevard
Dallas, TX 75390

If you tell the researchers to stop using your health information, your participation in the study will end and the study staff will stop collecting new health information from you and about you for this study. However, the study staff will continue to use the health information collected up to the time they receive your letter asking them to stop.

Can you ask to see the PHI that is collected about you for this study?
The federal rules say that you can see the health information that we collect about you and use in this study. Contact the study staff if you have a need to review your PHI collected for this study.

Because of the type of research, you can only access your PHI when the study is done. At that time, you have the right to see and copy the medical information we collect about you during the study, for as long as that information is kept by the study staff and other groups involved.

How long will your PHI be used?
By signing this form, you agree to let us use and disclose your health information for purposes of the study until the end of the study. This permission to use your personal health information expires when the research ends and all required study monitoring is over.

Contact Information – Who can you contact if you have questions, concerns, comments or complaints?

If you have questions now, feel free to ask us. If you have additional questions, concerns, comments or complaints later or you wish to report a problem which may be related to this study please contact:

Primary contact:
Deborah Farr, M.D. can be reached at 214-648-5890 during normal work hours and at 214-645-4673 after normal work hours.

The University of Texas Southwestern Medical Center Human Research Protection Program (HRPP) oversees research on human subjects. HRPP and Institutional Review Board (IRB) representatives will answer any questions about your rights as a research subject, and take any concerns, comments or complaints you may wish to offer. You can contact the HRPP by calling the office at 214-648-3060.

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Research Consent & Authorization Signature Section

If you agree to participate in this research and agree to the use of your protected health information in this research, sign this section. You will be given a copy of this form to keep. You do not waive any of your legal rights by signing this form.

SIGN THIS FORM ONLY IF THE FOLLOWING STATEMENTS ARE TRUE:

- You have read (or been read) the information provided above.
- Your questions have been answered to your satisfaction about the research and about the collection, use and sharing of your protected health information.
- You have freely decided to participate in this research or you are voluntarily giving your consent for another person to participate in this study because you believe this person would want to take part if able to make the decision and you believe it is in this person's best interest.
- You understand that a copy of this signed consent document, information about this study, and the results of any test or procedure that may affect your medical care, may be included in your medical record. Information in your medical record will be available to health care providers and authorized persons including your insurance company.
- You authorize the collection, use and sharing of your protected health information (another person's protected health information) as described in this form.

Adult Signature Section

Printed Name of Participant	Signature of Participant	Date	Time AM PM

Printed Name of Person Obtaining Consent	Signature of Person Obtaining Consent	Date	Time AM PM

Blind or Illiterate Signature Section *At the time of consent, also complete this section if consent is obtained from an individual who is unable to read and/or write but can otherwise communicate and/or comprehend English (e.g., blind, physically unable to write, etc.)*

Declaration of witness:

By signing below, I confirm I was present for the entire consent process. The method used for communication (e.g., verbal, written, etc.) with the subject was: _____ .

The specific means (e.g., verbal, written, etc.) by which the subject communicated agreement to participate was: _____.

Printed Name of Witness	Signature of Witness	Date	Time AM PM