CONSENT TO TAKE PART IN A RESEARCH STUDY

STUDY TITLE: A Pilot Study Evaluating Photobiomodulation Therapy for Diabetic Macular Edema

STUDY DOCTOR'S INFORMATION
Name:
Contact Number:
Site Name:
Site Address:
Emergency (24-hour) Number:
Study Coordinator Name/Contact:

SUMMARY
This consent form will give you important information about this study. It will help you decide if you would like to take part in the study. You do not have to be in this study. You can stop the study at any time. You should read and discuss all the information in this consent form with the study doctor.

- **The study is being done to test a light device for treatment of diabetic macular edema ("DME").**
- **You will be asked to be in the study for about eight months. The study will involve wearing a patch that shines a light over your closed eye for ninety seconds twice a day, every day. Two different light frequencies will be tested. One "active light" is expected to affect the DME based on early studies in animals and clinical studies in other diseases. The other "inactive light" is not believed to have any effect and will be used as a comparison. Half of the participants will start with the active light and half will start with the inactive light. At four months, the treatment will be switched. You will not know whether you have the active or inactive light first.**
- **During the study, there will be seven office visits. At these visits, you will have vision testing, an eye exam, and imaging of your eye. You will also be asked if you would like to be in a group that may get text message reminders to help some participants remember to use the device more often. You can still be in the main study even if you do not want to be in this group.**
- **The most likely risks to you are short-term effects of the light device, including reduced sensitivity to light and appearance of an afterimage for a few minutes after the treatment is stopped.**
- **The possible benefit is that it is possible the light device will make the DME better. However, that is what the study is trying to find out. People who take part in this research study will add to new knowledge that may help other people with the same problem.**
- **If you do not participate, you may receive any of these alternatives outside of the study: observation with no treatment, an anti-VEGF or steroid drug injection into the eye, or**

laser treatment of the eye. The device being tested in this study is not available for purchase or use outside of the study.

WHAT IS INFORMED CONSENT?

You are being asked to take part in this research study because you have diabetic macular edema (DME). DME is the term used for swelling in the central part of the retina, which is caused by leaky blood vessels from diabetes. The goal of this study is to learn whether a non-invasive light device that can be worn at home may help people with DME.

Your study doctor will be talking with you about this study and this form. You can take as much time as you need to think about whether or not you want to be in this study. You can also take a copy of this form with you to discuss with friends, family, or other doctors to help you decide. Please read this document carefully. Do not agree to be in this study unless all of your questions have been answered.

You do not have to be in this study. If you decide not to be in this study, you will not be treated differently as a person just because you didn't want to be in this study. Also, your regular care will not be impacted.

WHO IS DOING THE STUDY?

This study is being done by DRCR.net, which is a group of clinical sites dedicated to research of retinal diseases. It is being paid for by the National Eye Institute (NEI), one of the National Institutes of Health of the U.S. Public Health Service, a part of the federal government. A company called PhotoOptx, LLC is providing the devices for the study. The Jaeb Center for Health Research is the Coordinating Center for the study. They will use the funding to organize the study and to pay your study doctor's office for their work on the study. Your study doctor and clinic staff will carry out this study. The name of the study doctor and the doctor's contact information is listed on the first page of this form. If one of the study doctors gets money or benefits from the company that makes the device in this study, then they have to tell the Jaeb Center.

WHY IS THIS STUDY BEING DONE?

When swelling is in the center of the macula from DME, it can reduce vision. This is because the center of the macula is used for sharp vision used for reading or driving or recognizing faces. When vision is already reduced from DME, injections of anti-VEGF drug may be given in the eye. When vision is not reduced from DME, doctors may or may not recommend any treatment. Treatment that could be given includes an injection of anti-VEGF drug into the eye or laser treatment.

The purpose of this study is to determine if wearing a device (like an eye patch) that shines a certain light over your closed eye for 90 seconds twice a day can make the swelling from DME go away. If it does, this would delay or avoid needing other treatments like injections or laser.

WHO CAN PARTICIPATE IN THIS STUDY?

The study will include about 134 participants with DME and good vision. In general, to take part in this study, you must:

- Be 18 years or older
- Have DME with good vision (about 20/25 or better) in at least one eye
- Be able and willing to wear the light device twice a day for 90 seconds each time for 8 months.

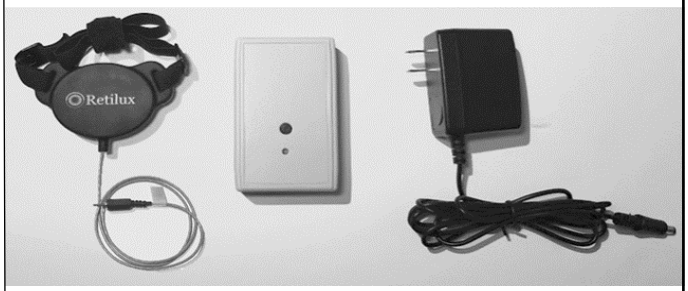
Also, you must not:

- Have another eye condition in the study eye that may affect your vision or need treatment during the study
- Have had already received certain treatments in the affected eye in the past.

Your study doctor and staff will review more health-related requirements with you. If both of your eyes have DME and are eligible for the study, the one with more swelling will be included in the study. We will refer to the eye enrolled in the study as a ***study eye.***

WHAT WILL HAPPEN IN THIS STUDY?

The study will last up to 8 months for each participant. First, testing will be done to see if you are eligible for the study. We will ask you questions about your medical history and previous eye problems and treatment. Then, some tests will need to be completed, if they have not already been done, to find out if you are eligible. If you are eligible and still want to be in the study, a computer program will be used to select whether you will be given the active light device or inactive light device first. This is like flipping a coin to decide which treatment you will receive first. You won't be able to tell if you are using the active or the inactive light device. The study team will show you how to use the device (see Figures below) and answer any questions. The first treatment will be done in the doctor's office.

Device as worn over eye (connects to control unit pictured on right).	**Device, control unit, and power supply.**
	

During the study, you will be asked to use the light device *on the study eye* twice a day for ninety seconds each time. It is recommended that you wear the device one time when you wake up in the morning and one time at night before you go to sleep. It is very important that you follow the treatment

requirements so that we can have the best chance at figuring out whether the treatment works. It is also important that you only use the device *on the study eye.* You will be provided an instruction sheet with more information to take home.

You will be asked to return for a follow-up visit once a month for the first four months. You will be asked to bring the device to each follow-up visit so that the information about how often it has been used can be downloaded. At the four month visit, you will switch to the other treatment. For example, if you first received the active treatment device, you will be switched to the inactive device. If you first received the inactive device, you will be switched to the active device. This way, all participants will receive active treatment for four months during the eight-month study. After the switch, you will have two more visits, at six and eight months. You will receive a call from the doctor's office within one week after you begin the study to make sure that you do not have any questions about the device.

If at any point during the study you and your study doctor decide a different treatment is needed for your DME, study testing will be performed first. If a different treatment for DME is given, you will no longer need to use the study device. In this case, your participation in the study will end after the 4-month visit.

The testing that will be completed during the study is described below. The timing of each test is in the table on page 5.

1. **Vision Testing**
   - This will include measurement of your visual acuity (the ability to read letters on the vision chart) using an electronic tester. This measurement will be done of each eye separately.

2. **Eye Exam**
   - An eye exam will be performed. The structures inside the eye will be examined through a special microscope after drops have been placed in your eyes to dilate your pupil. The pressure in your eye will be measured.
   - The eye exam will be completed on both eyes at the beginning of the study.
   - During the study, the eye exam will be required in the study eye at 4 and 8 months only. It will be up to your study doctor to decide if an exam is needed at all other visits.

3. **Optical Coherence Tomography**
   - Optical coherence tomography (referred to as OCT) uses a dim beam of light to measure the thickness of the retina. You will look into a machine at a pattern of flashing and rotating red lights. During the study, OCT will be used to find out if the retinal swelling is getting worse, better, or staying the same. This test will be done on both eyes

4. **Laboratory Tests**
   - A blood test called HbA1c will be done to see how well your diabetes is controlled. In most cases, a finger stick will be done for HbA1c testing. If needed, a blood sample less than 3 teaspoons (15 mL) may be taken instead.
   - If there is any chance that you might be pregnant, a urine pregnancy test will also be done.

5. **Measurement of Blood Pressure**
   - Your blood pressure will be checked with a cuff that is placed on one of your arms at the beginning of the study.

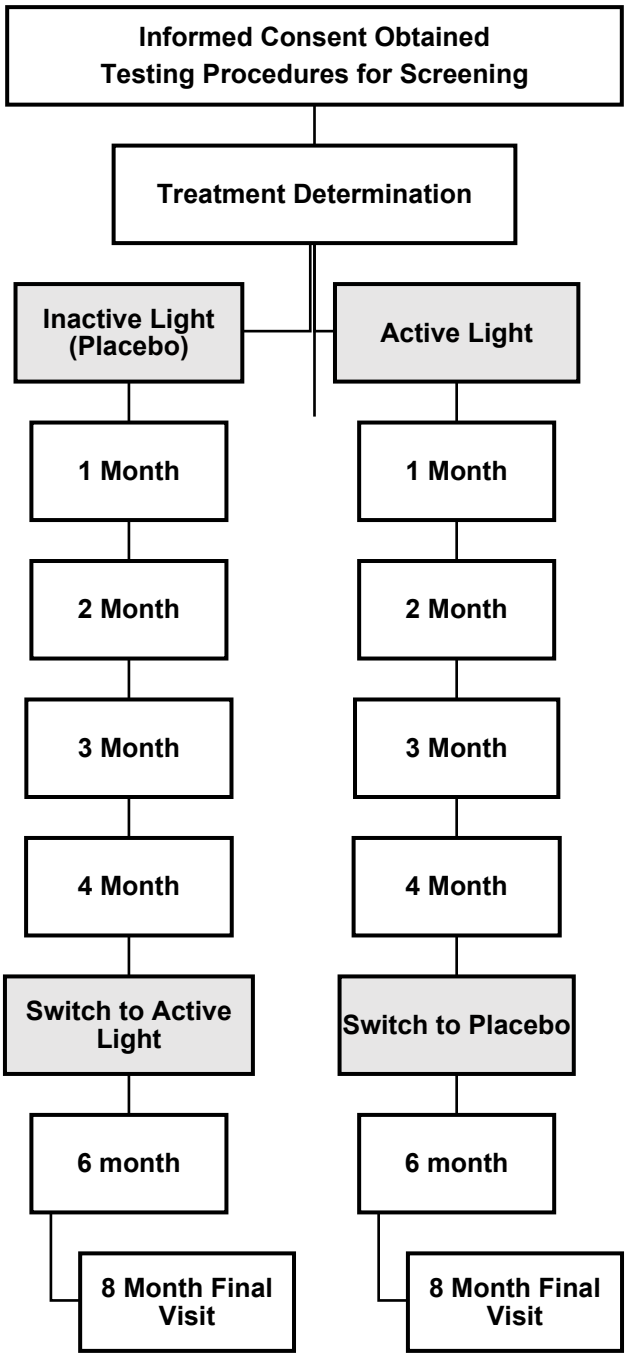
6. **OCT Angiography (OCTA)** *(only at select doctor's offices)*
   - OCTA is a new type of OCT machine that is used to look at the blood vessels in your eye. If your doctor's office has an OCTA system, this test may be done on the study eye only. The procedure is similar to the regular OCT described above and will take less than 5 minutes.

The table below gives a summary of what will happen at each visit:

	Baseline Visit	**Follow-Up Visits (1,2,3,and 6-Month)**	**4 and 8-Month Outcome Visits**	**DME Treatment Visit***
Device training	X			
Compliance Assessment		X	X	
Treatment determination	X			
Electronic visual acuity testing in both eyes	X	X	X	X
OCT in both eyes	X	X	X	X
Eye Exam	Both eyes	Only if Needed	Study eye only	Study eye only
Blood pressure	X			
HbA1c	X			
OCT Angiography in the study eye only (if available)	X		4-month only	

***** If at any point during the study you and your study doctor decide a different treatment is needed for your DME (at a non-study visit), study testing will be performed first.

The following diagram shows a summary of the study:



Optional Text Message Sub-study

As part of the study, we will also be testing whether text message reminders help participants remember to use the device more often. If you have the ability to receive text messages and give permission to participate in this part of the study, a computer program will be used to decide whether or not you will receive text message reminders. This is like flipping a coin to decide if you will receive text messages or not during the study. If you are in the text message group, you will receive a text daily for the first two weeks and then once a week thereafter. The text will be sent at a time of day that you indicate is best for you. You will not need to reply to these reminders. The first text will be sent while you are at your eye doctor's office to make sure it works. At the end of this form, you will be asked to decide whether or not you are willing to be randomly assigned to receive text message reminders and, if chosen to receive reminders, you agree to receive text messages as a part of the study.

WHAT ARE THE RISKS OF THIS STUDY?

Risks of Eye Examination and Tests

- **Eye Exam:** As part of the eye exam, drops will be put in your eyes to dilate the pupils. The drops may blur your vision and make you sensitive to light. The drops will wear off over several hours. There is a small risk of an allergic reaction to the drops. There is also a small risk that the drops could cause the eye pressure to rise. If this happens, it will be treated, but there is a small risk of losing vision from the pressure rise. Due to the blurring effect on your vision and possible light sensitivity, we recommend that you do not drive until the blurring effects of the drops have worn off. If necessary, have someone come with you who can drive for you after the exam.

- **OCT and OCTA:** There are no known risks.

- **Blood Draw Risks:**
  Anytime you have your blood drawn you may have bruising, discomfort, bleeding, infection, or fainting. These risks are possible but unlikely, and usually mild.

Risks of the Light Device:

The bright light can be uncomfortable while the device is on. After the treatment is stopped, it may be difficult to see and distinguish colors for a few minutes. You may also see an afterimage that fades away in 2 to 5 minutes. An afterimage is when you look directly at any bright light and then continue to see an image of that light after you look away. Please do not perform activities that require your full sight (e.g., driving) until your vision has completely returned to its normal level.

Unknown risks:

It is always possible that anyone using a device for the first time may have an allergic reaction. Also, there may be additional risks from the device or the study procedures that are not known. If we find out that there are any new risks, you will be told about them. You will be able to decide if you want to continue in the study based on this new information.

Risks to confidentiality:
This study will be capturing some information about you that includes identifiable, personal information, like your date of birth. The study has procedures in place to protect that information. There is a chance that a loss of that protection could occur. This would be a loss of confidentiality. Please see the "How will my information be protected and kept confidential" section below for more information. If you take part in the text message part of the study and someone sees your text messages, they might know that you are in a study too.

Risks for women:
The risks of the device in this study on an unborn baby are unknown. For this reason, women who are pregnant cannot be in this study. Women who become pregnant during the study will be asked to stay in the study but will no longer use the device. Urine pregnancy tests may be done as part of this study, if there is any possibility you might be pregnant. You will also be asked about how you plan to make sure that you do not become pregnant while in the study (like if you use birth control).

Please discuss the risks with your study doctor or any other health care provider.

WHAT ARE THE BENEFITS OF TAKING PART IN THIS STUDY?

The possible benefits are that the light device might make the DME better. That is what the study is trying to find out. People who take part in this research study will add to new knowledge that may help other people with DME. Receiving text messages may help you remember to use the device.

ARE THERE OTHER OPTIONS THAN BEING IN THIS STUDY?

If you do not take part in this study, your options include standard treatment like anti-VEGF or steroid drug injections, laser treatment, other research studies, or you may choose not to do anything. The device being tested in this study is not available outside of the study. Your study doctor will discuss these choices with you. You can still be in the study if you decide not to be in the text message study group.

CAN I STOP BEING IN THE STUDY?

You can stop being in the study at any time. If you decide to stop being in this study, you will not be treated differently as a person. Also, your regular care will not be impacted. Please talk to your study doctor or staff so they know why you are stopping the study. **If you decide to stop, it is important that you return the study device to your doctor's office.**

If you are in the text message study group, you can decide to stop getting text message reminders at any time. You will need to tell your study doctor to stop receiving text message reminders.

If we find out that there are any new risks, you will be told about them. You will be able to decide if you want to continue in the study based on this new information.

The study may stop or the study doctor may decide to take you out of the study at any time. You do not have to give permission for the study to stop or for the study doctor to remove you from the study. You will be told if this happens.

Some reasons why you may be removed from the study include:

- The doctors feel that it is in your best interest
- The doctors think that being in the study may cause you harm

If you withdraw, are removed from the study or the study is stopped, you may continue to receive care like you normally would if you were not in this study.

ARE THERE COSTS RELATED TO TAKING PART IN THE STUDY?

Testing that is specifically for this study will be paid for by the study. The costs of routine treatment, office visits, and tests that are part of your regular care for diabetic eye disease will be billed to you or your insurance company like they normally would if you were not in a study. The study will pay for visual acuity measurements, eye exam, OCT, and OCTA at required visits. All other tests and procedures, which are not part of the study, will be your or your insurance company's responsibility. Depending on your cell phone provider, message and data rates may apply if you are in the text message group. The study will not pay for these charges.

The study device will be provided to you at no cost during the study. **At the end of the study, or if you decide to withdraw from the study, you must return the device to your study doctor's office.**

IS THERE PAYMENT FOR TAKING PART IN THIS STUDY?

If you take part in the study, you will receive up to $350 for your participation. These payments will be paid as follows: $50 for each completed visit. These payments will be made by gift or money cards given to you by your study doctor's office. The payment for the four and eight month visit will be provided upon return of the study device. If you withdraw from the study, you will still be paid for the visits that you have completed. You will not receive extra payments for visits that are required as part of your normal care or for visits that are for treating an illness or injury. You may be asked to repeat a testing procedure (OCT for example) if the study staff cannot use your data. If repeating the procedure requires you to schedule a doctor's visit outside of normal care, you will be provided an additional $25 gift or money card. There is no additional payment for taking part in the text message group.

The study may reimburse you for travel expenses, if you have specific additional travel expenses that make it difficult for you to return for study visits.

Because payments made to you for participating in this study may be reported to the IRS as income, you may need to provide your social security number or a Form W-9 to your study doctor's office. These will not be shared outside of your doctor's office, other than as required to the IRS.

WHAT HAPPENS IF I HAVE AN ILLNESS OR INJURY FROM BEING IN THE STUDY?

If you have an illness or injury that is related to your participation in the study, then you can get care like you normally would. If you have an emergency, please seek emergency care as soon as possible. Please tell the emergency doctor that you are in a research study. Please also tell your study doctor about the emergency as soon as you can. The study will not provide costs for care or other expenses relating to illnesses or injuries. The costs of care for illnesses or injuries will be billed to you or your insurance company like they normally would. Your study doctor, the study doctor's office, the Jaeb Center, and the National Eye Institute are not offering payment for lost wages, direct losses, or indirect losses.

CONTACT INFORMATION FOR QUESTIONS OR PROBLEMS

If you have questions about this study; a research illness or injury; or have concerns, suggestions or questions about the study, then contact your study doctor using the contact information on the first page of this form.

Contact the Jaeb Center for Health Research Institutional Review Board (IRB) Office at 813-975-8690 or irb@jaeb.org if you:

- Have questions about your rights as a research participant
- Wish to talk about your concerns or suggestions about the research
- Want additional information about the research, or
- Want to provide comments about the research.

HOW WILL MY INFORMATION BE PROTECTED AND KEPT CONFIDENTIAL?

As required by law, study-related records with identifying information will be kept confidential. Safety measures for the access, security, and privacy of your information have been put in place by law. Your date of birth and initials may be used in the study to help the researchers keep the right information together. This information will be protected as described below. Unless the law requires it, your name, address, social security number, telephone number, or any other direct identifying information will not be used to identify you.

Certificate of Confidentiality

The National Institutes of Health has guaranteed a Certificate of Confidentiality for this study. This adds special protection for study information that identifies you and allows us, in some cases, to refuse to give out information that could identify you without your consent. This could be done when the information is requested by a federal, state, local court or public agency. If you need medical help, we may still share your identifiable information. As described in this form or in other cases, we may share identifiable information. For example, if the government inspects us, they may see your identifiable information. Your study doctor and research team will follow local laws and will tell the local or state authorities:

- if certain diseases are present;
- if they suspect neglect, abandonment, or abuse of you; and

- if your study doctor or research team learn that you plan to harm yourself or someone else

Purpose of Authorization
We have rules to protect information about you. Federal and state laws also protect your information. By signing this form you are giving your permission, called your "authorization," for the use and disclosure of information protected by the law.

You must sign the Protected Health Information Authorization at the end of this form if you want to be in the study. When you sign the form, you give permission for the use and sharing of your Protected Health Information (PHI) for the study. PHI is health information that identifies you. Your authorization is beneficial and important for the study. Without your authorization, you will not be able to be in this study.

Using and Sharing Your PHI
Your study doctor will collect information about you. This information includes things learned from study procedures as well as your name, address, date of birth, and information from your medical records. These are examples of identifiable information. A code number with your initials and date of birth will replace your name, address, telephone number, or social security number in the results given to the Jaeb Center for Health Research in Tampa, Florida.

The study doctor's office will not share study results that can identify you except as explained in this form or when required by law. The Jaeb Center and your study doctor's office will guard the privacy of your study PHI.

Study results without the identifiable information may be shared in medical journals and at scientific meetings. Your records will be confidential. No one will share your identity in a medical journal or at a scientific meeting.

Results from the study will be sent to you in a letter when they are made public.

Who Can Receive and Use Your Study Information?
It is possible that people outside of this doctor's office and the Jaeb Center may need to see or receive your information from this study. Some examples include government agencies (such as the Food and Drug Administration), committees that monitor safety, the central reading center for OCTs, other sites in the study, the investigators who help run the study, and the company providing the devices for the study. In most cases the information will have a code number with it instead of your name, address, telephone number, or social security number.

There are some situations where the information will not have a code number but may include your name, address, telephone number, or social security number (PHI). If so, people outside this doctor's office who assist in your care may see your study PHI. They may not be covered by the law. Everyone who needs to see your information will be told it is confidential, but we cannot guarantee full confidentiality once it leaves the doctor's office.

Other Considerations
The information collected in the study may be used in future studies without additional permission from you. This may include research done by other researchers. The information that may be shared will not contain any information that could identify you. There may still be a chance that someone could identify you, but this is not likely. A copy of the information collected as part of the study will be made public in a dataset. This will be done after the study ends. This dataset will not contain any PHI. The study results will also be made public. These results will not have any information that could identify you.

A limited dataset that contains some PHI may be provided to certain researchers. This PHI will not include things like your name, address, or medical record numbers. Any researcher would need to sign an agreement to protect your PHI before getting this dataset as required by law.

Contact from the Jaeb Center
Separately from your research data, the Jaeb Center for Health Research will be provided with your contact information.

- After enrollment, you may receive a phone call from a staff member at the Jaeb Center to see if you have any questions. You will be called at a time that you indicate is most convenient for you. If you are not available at the time of the call and prefer to call the Jaeb Center yourself, you can call them toll-free at 1-866-372-7601

- If we are not able to locate you when we try to schedule your follow-up visit, the Jaeb Center may try to contact you through the alternative contact information you have given us. If this is not successful, the Jaeb Center may use a third-party search service.

- If you are in the text message study group, you will receive text messages from the Jaeb Center through a third-party texting service. The text messages will be sent automatically using a computer program from the Jaeb Center database. This database is designed with security protections. Your contact information will be saved in a different part of the database and will not be saved with your study information. The third-party texting service will only receive your phone number and has agreed to only use your phone number for the study texts.

Clinical Trial Reporting
A description of this clinical trial will be available on *http://www.ClinicalTrials.gov*, as required by law. This website will not include information that can identify you. At most, the website will include a summary of the results. You can search this website at any time. A copy of one of the study consent form templates will also have to be posted on a federal website.

Can You Cancel Your Authorization?
You may cancel your permission for the collection of your study PHI at any time. You will need to contact your study doctors and give them a written notice of cancellation, or you may contact the JCHR IRB Office at 813-975-8690 or irb@jaeb.org. When you cancel your permission or when you withdraw from the study directly, you are no longer part of the study. No new information about you will be gathered for the study except when there is a safety concern related to the study. If there is a safety concern, your entire medical record may need to be reviewed.

The Jaeb Center will receive all the information that was collected for the study up to the time that you cancel or withdraw from the study. The Jaeb Center will receive any new information about any safety concerns that may be related to the study.

When Will the Use and Sharing of Your PHI Stop?
Some of your study PHI does not have a code number with it. Your permission for the use and sharing of your PHI lasts 50 years from the date that you sign this form or until the end of the study, whichever comes first.

The rest of your study information that is not PHI does have a code number with it. When it is collected, it becomes part of a research report. Your permission for the use and sharing of this coded information will never end. This coded data does not have your name, address, telephone number, or social security number.

Some of your information from this study may be stored separately from or added to your medical record. You will not be able to see this information until the study ends. If your regular doctors require it for your care, they will be able to view it.

Study Information for Future Use
Your study information that is identifiable may be stored, maintained or used for future research by the Jaeb Center and DRCR.net. This is not the same as using the information in your medical records collected as part of your regular care. The identifiable information that might be used include OCT scans. OCT scans are only identifiable if they can be matched to a database that already includes pictures of your retina for identification purposes. OCT scans may be made publically available. Your OCT scans could be used for other research, to help design future studies, or for teaching materials. The types of research that may be conducted with this information include analyses to help researchers better understand the condition being studied or plan future studies.

Your identifiable study information may be stored and used indefinitely.

You will not be told about the specific future uses of your identifiable information because they are unknown at this time. This means that you will not be told about the purpose of the future research. You should think about whether there is a certain kind of research study for which you would normally not want your information to be used, because at this time we do not know what types of future studies may be done using the information collected in this study. Also, the results from the future studies will not be shared with you.

There are plans to protect your information by storing it in a secure database to which only authorized personnel have access. There are also plans to protect your information by removing any dates, names, initials, or other information from the OCT scans that could make it easier to identify you. There is still a risk that a loss of that protection could occur. This would be a loss of confidentiality.

It is not expected that you will have any benefit by allowing your identifiable information to be stored, maintained, or used for these future research purposes. You do not have to allow the Jaeb Center to store, maintain, or use your identifiable information for future purposes if you don't want to. However,

you will not be able to be in the main study if you do not agree to the future use. You will not be treated differently either way. Your regular care will not be impacted. If in the future you change your mind about the future use of your identifiable information, please know that we will not be able to get the OCT images back. This is because there is not any other information with those images that would tell us which ones are yours.

Please contact the Jaeb Center for Health Research Institutional Review Board (IRB) Office at 813-975-8690 or irb@jaeb.org if:

- you have questions about your rights as a research participant
- you have had harm related to this future research process
- wish to talk about you concerns or suggestions about the storage, maintenance or use of your identifiable private information
- the future research studies
- want additional information, or
- want to provide comments

Participant's Full Name (printed) _____

Study Participation: A Pilot Study Evaluating Photobiomodulation Therapy for Diabetic Macular Edema (Protocol AE)

By signing below, you agree to take part in this study. Your signature means that:

- you have read this informed consent form
- you have been given the chance to discuss the study and to ask questions to your satisfaction
- you freely choose to participate and you can withdraw at any time
- you allow the future use of your identifiable private information at this time
- you will receive a copy of this consent form
- you authorize the use and disclosure of your protected health information. This information is collected as part of participation in this study. You cannot be in this study if you do not provide this permission.

_____ _____
Participant Signature Date

Responsibility for Returning Device

By signing below, you understand that you will need to return the device to your doctor's office, even if you decide to withdraw from the study.

_____ _____
Participant Signature Date

Text Message Study Enrollment

By signing below, you agree to take part in this optional part of the study. Your signature means that you have read the explanation above and have been given the opportunity to discuss the study and to ask questions.

Please choose only one of the options below:

1. ____ I **agree** to be randomly assigned to receive automatic text message reminders or not, or
2. ____ I **do not** want to receive text message reminders automatically.

_____ _____
Participant Signature Date

Investigator's Certification

I certify that to the best of my knowledge the participant understands the nature, demands, risks, and benefits involved in the participation of this study.

_____	_____	_____
Investigator's Printed Name	Investigator's Signature	Date