Yale HIC# 1604017628

COMPOUND AUTHORIZATION AND CONSENT FOR PARTICIPATION IN A RESEARCH STUDY

Yale University School of Medicine The Low Grade Glioma Registry OPTIMUM Participants

Study Title: OPTimIzing engageMent in discovery of molecular evolution of low grade glioma" (OPTIMUM)

Principal Investigator: Elizabeth B. Claus, MD, PhD

Phone Number: 203-785-6415

Invitation to Participate and Description of this Research Project

Why is this study being offered to me?

You are invited to take part in a research study designed to look at low grade glioma (LGG). You have been asked to take part because you have been diagnosed with a glioma and you have had two or more surgeries to treat your glioma.

Who is Paying for this Study?

Funding for this project has been received from the National Cancer Institutes (NCI) as part of an initiative called "Patient Engagement and Cancer Genome Sequencing (PE-CGS) Centers. Our study group has been designated a Center and includes researchers from Yale University, Jackson Laboratory, The University of Colorado, Brigham and Women's Hospital, and Beth Israel Deaconess Medical Center. The title of our project is called "OPTimIzing engageMent in discovery of molecular evolution of low grade glioma" or OPTIMUM.

What is thus study about?

Little is known about low grade glioma, a slow growing tumor of the brain. In an effort to increase knowledge about this relatively rare diagnosis we are asking adults diagnosed with LGG and who have had two or more surgeries for their LGG to join this study to discover why some people develop LGG while other people do not. We also hope to learn more about the effect of this diagnosis and the associated treatments on daily life including the ability to work, drive, sleep, exercise, or take care of oneself and/or family.

Genetic information can lead to a better understanding of glioma risk as well as improved selection of treatment for glioma patients. Genes often contain small changes. Sometimes these changes do not cause any problems, but sometimes these changes are more serious and can interfere with the way the gene is supposed to work. In this study we wish to study inherited genetic changes to determine whether there is any relationship between such changes and glioma risk. To do so we will perform genetic sequencing on your blood/saliva and tumor samples. In addition, we wish to study genetic and molecular characteristics of glioma tumors to determine whether we can better predict patients' response to treatment.

In addition to learning more about the genetics of glioma, we also want to better understand the symptoms associated with treatment. Some participants will be asked to complete online surveys and provide smartphone sensor data to collect and track common symptoms of glioma treatment including fatigue, cognitive difficulties and reduction in physical activity. Some participants will be asked to keep a health or activity diary while others will be invited to participate in a physical exercise program. The information gathered from these efforts will be used to learn what can be done to improve symptoms reported by LGG patients.

In order to decide whether or not you wish to be a part of this research study you should know enough about its risks and benefits to make an informed decision. This consent form gives you detailed information about the study. This form will go over all aspects of this research: its purpose, the procedures that will be performed, any risks of the procedures, possible benefits and possible alternative treatments. Once you understand the study, you will be asked if you wish to

Yale HIC# 1604017628

participate; if so, you will be asked to sign this form.

What are you asking me to do and how long will it take?

The study has three parts. You may participate at your convenience and may choose to participate in all or only some parts of the study.

- Participation in the first part of the study asks you to to complete an online questionnaire (https:/). The questionnaire will take about 30 minutes to complete and will ask you for information on your glioma treatment and its effect on your daily life. We will also look at your medical record to learn about your treatments as well as possibly re-contact you to gather this information. We will retrieve a tissue specimen from all of the hospitals where you received treatment for your glioma and use this/these specimens to review your diagnosis and to study tumor genes. Note that only excess tissue will be obtained from the pathology department.
- The second portion of the study will attempt to examine whether variations in inherited genes are associated with glioma. For this portion we will ask you to donate one blood or saliva sample. The blood sample is collected via a kit that we will mail to you and that you can bring to your healthcare provider or a local blood draw laboratory to have them draw your blood. We will draw 40 ml (about eight teaspoons) of blood for analysis. If a blood sample is unable to be obtained or you prefer not to have blood drawn, we will ask you to donate a saliva sample. The saliva sample (which consists of spitting into a cup) is collected via a kit that we would mail to you and that you would then mail back to us when you have completed the collection. Our study will look at certain genetic (DNA) traits using the blood/saliva cells to see if there is any association with glioma. In addition to the current study, we anticipate that future medical discoveries will suggest additional genes that may be associated with medical conditions. If you allow us, we would like to store any remaining specimen so that we may perform tests in the future that would be related to medical research.
- The third portion of the study asks patients to use their smartphone to perform a series of tasks that test neurological functions such as memory. We will also ask you to contribute activity data collected through the sensors on your smartphone. You may choose not to provide this data and still participate in the study. We will NOT access your personal contact, other applications, photos, text or email messages. If you are undergoing treatment we may ask you to do these tasks before and after your treatment. We will send notices on your phone asking you to complete these activities and surveys.

Are there any costs to participation?

There are no costs to you for participation if you send this consent via the secure Yale website <u>glioma@yale.edu</u>. You may also sign the consent electronically on our website. If you decide to send this consentor any other study materialsvia mail you will need to obtain a stamped envelope to return the consent to Dr. Elizabeth B. Claus, School of Public Health, Yale University, 60 College Street, New Haven, CT 06520-8034.

Transmitting data collected in this study may count against your existing mobile data plan. You may configure the application to only use WiFi connections to limit the impact this data collection has on your data plan.

Risks and Discomforts

Blood Specimen: There are no unusual risks involved in having blood drawn. The process may include pain, bruising, and bleeding, or lead to an infection at the site of the needle stick (although infection is a rare complication).

Saliva Specimen: There are no unusual risks involved in having saliva cells obtained.

Under some circumstances, it can be a risk for genetic information to be known by the subject or others. Variation in some

Yale HIC# 1604017628

genes is known to be directly related to risk of certain illnesses. In some cases, knowledge of genetic information could have negative psychological consequences or could affect access to or retention of certain benefits or entitlements. For example, the information could potentially be used against you if it were revealed to insurance companies or potential employers. We will take precautions to ensure that confidentiality is maintained and that genetic information is not unintentionally disclosed to inappropriate third parties. There is a federal law called the Genetic Information Nondiscrimination Act (GINA). In general, this law makes it illegal for health insurance companies, group health plans, and most employers, except those with less than 15 employees, to discriminate against you based on your genetic information. However, it does not protect you against discrimination by companies that sell life insurance, disability insurance, or long-term care insurance.

How can the study possibly benefit me?

You may not receive any direct benefit from allowing your information to be stored and used. If you wish, we will send you a copy of the genetic results for your **tumor** sample although the extent to which this information is helpful to your care in not yet known. In addition, if you wish, if we identify genetic results in your **blood/saliva** sample that may be medically important we will alert both you and your health care provider so that you may review and decide whether additional care is warranted. If you participate in the smartphone portion of the study, you will be able to visualize your own data and potentially learn more about trends in your health.

How can the study possibly benefit other people?

We hope that the information we learn will increase our knowledge of LGG and that this information will lead to better treatments in the future.

What Information Will You Collect About Me in this Study?

The information we are asking to use and share is called "Protected Health Information." It is protected by a federal law called the Privacy Rule of the Health Insurance Portability and Accountability Act (HIPAA). In general, we cannot use or share your health information for research without your permission. If you want, we can give you more information about the Privacy Rule. Also, if you have any questions about the Privacy Rule and your rights, you can speak to Yale Privacy Officer at 203-432-5919.

Confidentiality

The majority of the results of these tests are within the realm of research and at present, have no known clinical significance. However, it is possible that genetic testing of your blood/saliva sample may identify findings that are medically important and therefore these results will be returned to you and your designated health care provider. Results will not be given to your family membersor any third party. These results may be entered into your general medical record by your health care provider; We will keep all facts about you private to the extent allowable by law.

We will process and store your data electronically. Only a study number identifies each subject in the database; confidential personal information (e.g., all names, addresses, phone numbers) will be encrypted and stored separately from other data. All specimens and results of the genetic/molecular analyses will be identified only by study ID number. Your name and other facts that might identify you will not appear when we present this study or publish its results. All staff members will be informed prior to employment and at regular intervals as to the necessity for keeping all data confidential. All written study material will be stored in locked file cabinets or on the Yale secure Cloud.

The information that may be used or disclosed includes the following: your name and other identifying and contact information; your LGG diagnosis and date of diagnosis; your completed questionnaire.

We will also give your genetic and other information about you, such as your medical conditions, to the National Institutes of Health NIH Genome-Wide Association Studies (GWAS) repository as well as the database of Genotypes

Yale HIC# 1604017628

and Phenotypes (**dbGaP**). GWAS studies look at the genetic differences that exist along the human genome, which is the complete set of human genes. The NIH GWAS repository stores genetic information and individual characteristics about people, like sex, age, medical conditions from people participating in many studies across the country. GWAS shares that information with researchers. We will send this information about you and other people in this study to the NIH GWAS repository. It will be coded and your name and other information that could identify you will be removed. NIH will not identify or make any attempt to identify information as coming from you or any other individual. NIH will share the collected information with researchers who submit applications to NIH to do research with information from the GWAS repository. Special data sharing committees will review those applications and decide whether or not to share the information with the researcher. The researchers who receive your information must promise to keep it confidential and to use it only for the research purpose approved by NIH.

The goal of GWAS studies is to speed up new medical discoveries and treatments by making it easier for researchers to share this information with each other. For example, GWAS data may be used to find out:

- Who is more likely to develop a certain illness, such as asthma, cancer, or diabetes, or a condition like high blood pressure or obesity;
- What genes affect the progress of a certain disease or condition; and
- What genes may affect treatments which now may or may not work in certain people.

GWAS research will not directly benefit you but it could lead to a greater understanding of the interaction between genes and health. This knowledge could help others in the future.

We are committed to protecting your privacy but we are ethically obligated to disclose your identity in some cases. For example, researchers may voluntarily report information about suspected or known sexual, physical, or other abuse of a child or older person, or a subject's threats of violence to self or others. If any member of the research team is given such information, she or he will make a report to the appropriate authorities.

When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity unless your specific consent for this activity is obtained.

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 NCI 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.

The Certificate of Confidentiality will not be used to prevent disclosure as required by federal, state, or local law such as child abuse and neglect, or harm to self or others.

How will you use and share my information?

We will use your information to conduct the study described in this consent form. The information that may be used or disclosed includes the following: your name and other identifying and contact information; your LGG diagnosis and date

Yale HIC# 1604017628

of diagnosis; your completed questionnaire.

We may share your information with:

- The U.S. Department of Health and Human Services (DHHS) agencies
- Representatives from Yale University, the Yale Human Research Protection Program and the Institutional Review Board (the committee that reviews, approves, and monitors research on human participants), who are responsible for ensuring research compliance. These individuals are required to keep all information confidential.
- Health care providers who provide services to you in connection with this study.
- Laboratories and other individuals and organizations that analyze your health information in connection with this study, according to the study plan.
- Co-Investigators and other investigators
- Study Coordinator and Members of the Research Team
- Data and Safety Monitoring Boards and others authorized to monitor the conduct of the Study

We will do our best to make sure your information stays private. But, if we share information with people who do not have to follow the Privacy Rule, your information will no longer be protected by the Privacy Rule. Let us know if you have questions about this. However, to better protect your health information, agreements are in place with these individuals and/or companies that require that they keep your information confidential.

What if I change my mind?

The authorization to use and disclose your health information collected during your participation in this study will never expire. However, you may withdraw or take away your permission at any time. You may withdraw your permission by telling the study staff at *203-785-6415* or by writing to Dr. Elizabeth B. Claus at the Yale University, New Haven, CT 06520.

If you withdraw your permission, you will not be able to stay in this study but the care you get from your doctor outside this study will not change. No new health information identifying you will be gathered after the date you withdraw. Information that has already been collected may still be used and given to others until the end of the research study to insure the integrity of the study and/or study oversight. If you decide to withdraw, your sample will not be destroyed; instead all identifying information will be removed and it will be studied anonymously. If you do not wish your sample to remain in the study you should not participate.

What if I want to refuse or end participation before the study is over?

Taking part in this study is your choice. You can choose to take part, or you can choose not to take part in this study. You also can change your mind at any time. Whatever choice you make, you will not lose access to your medical care or give up any legal rights or benefits. Not participating or withdrawing later will not harm your relationship with your own doctors or with this institution. To withdraw from the study, you can call a member of the research team at any time at 203-785-6415 and tell them that you no longer want to take part.

Authorization and Permission

I have read (or someone has read to me) this form and have decided to participate in the project described above. Its

Yale HIC# 1604017628

general purposes, the particulars of my involvement and possible hazards and inconveniences have been explained to my satisfaction. My signature also indicates that I have received a copy of this consent form.

By signing this form, I give permission to the researchers to use [and give out] information about me for the purposes described in this form. By refusing to give permission, I understand that I will not be able to be in this research.

Return of results (Check all that apply) I wish to receive a copy of the analysis of my tumor sample	
Name of Subject:	Date of Birth
Permanent Address:	
Email:	
Signature:	
Date:	

If after you have signed this form you have any questions about your privacy rights, please contact the Yale Privacy Officer at 203/432-5919.

If you have further questions about this project or if you have a research-related problem, you may contact the Principal Investigator, Elizabeth B Claus, MD, PhD at 203-785-6415. If you would like to talk with someone other than the researchers to discuss problems, concerns, and questions you may have concerning this research, or to discuss your rights as a research subject, you may contact the Yale Human Investigation Committee at (203) 785-4688.