INFORMED CONSENT FORM TO TAKE PART IN RESEARCH
The Montalcino Aortic Consortium:
Precision Medicine for Heritable Thoracic Aortic Disease
HSC- MS-16-0191
ADULT CONSENT FORM TO TAKE PART IN RESEARCH

INVITATION TO TAKE PART:

You are being invited to take part in a research study, called **The Montalcino Aortic Consortium: Precision Medicine for Heritable Thoracic Aortic Disease,** because you have an aortic aneurysm or dissection or an alteration in a gene causing aortic disease. It is being conducted by the Montalcino Aortic Consortium (MAC), an international, multi-center collaboration of researchers studying aortic diseases caused by gene changes. The MAC Houston Administrative Center is headed by Dr. Dianna Milewicz at the University of Texas Health Sciences Center at Houston (UTHealth). This research study has been reviewed by the Committee for the Protection of Human Subjects (CPHS) at the UTHealth (HSC-MS-16-0191).

Your decision to take part in this study is voluntary. You may refuse to take part or stop taking part at any time. A decision not to take part or stop being part of the research study will not change the services that are available to you from your physicians.

PURPOSE OF STUDY:

The primary goal of this study is to understand the medical problems caused by alterations in genes known to predispose a person to aortic disease so that doctors can improve the diagnosis and treatment of these conditions. Genes contain information that determines traits such as eye color and body size and are passed down from parents to offspring.

DESCRIPTION OF STUDY:

This study will collect medical information from various sources, including but not limited to, medical records, imaging records (echocardiogram, computed tomography or CT scan, magnetic resonance imaging or MRI, and others) and photographs. Data will be collected from medical records at enrollment and approximately every 2 years for a period of 20 years. This data will be entered in a secure database called REDCap. Data may be shared with qualified researchers at other sites, but it will not contain information that is used to identify you, such as your name, date of birth, etc. Identifying information and consent forms will be kept at the

MAC Houston Administrative Center based in the Department of Internal Medicine at the UTHealth.

Your identifying information (name, address, phone number, date of birth) will be kept at the MAC Houston Administrative Center. During the course of this study, you may be contacted by phone, mail, and/or email to update your medical records or contact information, collect additional information from you, and alert you to updates from the study.

Please indicate your choice and write your initials after each statement:

Information from Physical Exam and Medical Records
Information from your physical exams, laboratory tests and medical records will be collected by study personnel, and entered and stored in a secure database called REDCap. De-identified information from this database may be shared with qualified investigators for research on related conditions.

□ Yes □ No Initials _____

Imaging studies
Copies of imaging studies that were obtained to monitor your condition, such as echocardiograms, CT scans and MRIs, may be requested and kept at the Houston Administrative Center. The images will be de-identified and made available for qualified researchers at participating sites.

□ Yes □ No Initials _____

Photographs for research purposes
The study coordinator may request to take photographs of your face, hands, feet or other parts of the body with symptoms that may be related to your genetic or aortic diagnosis. These photographs will be used for research purposes. You may refuse photographs of any part of your body that you are uncomfortable having photographed. If you agree to these photographs, you will also be asked to sign a separate media authorization.

□ Yes □ No Initials _____

Future contact
A study personnel may contact you in the future to verify your address and phone number, request additional medical information, or ask you to complete a survey or questionnaire(s) related to this study.

□ Yes □ No Initials _____

A study personnel may contact you in the future to inform you about new research studies related to your condition.

□ Yes □ No Initials _____

Your name and date of birth may be sent to a national index to determine your vital status if the study is unable to contact you by phone or mail after two years.

□ Yes □ No Initials _____

Collection and Storage of DNA Samples

During the course of the study, you may be asked to provide a DNA sample. This DNA may be used for studies that identify genetic causes of aortic problems or additional genetic factors that may affect the severity of symptoms experienced by persons with alterations in genes already known to cause aortic disease. If you agree to take part in this study your DNA (genetic information) will undergo genome-wide analysis or DNA sequence analysis. These studies may involve complete sequencing of your DNA (called whole genome sequencing), sequencing of only the coding portion of your DNA (called whole exome sequencing), or sequencing of certain genes.

DNA samples will be stored at the Houston Administrative Center in Dr. Dianna Milewicz's laboratory at the UTHealth. DNA will be coded and banked until the sample is fully consumed, which may take years. You may be asked to donate a DNA sample more than once if further analysis is required. De-identified DNA samples may be shared with qualified investigators at other sites for genetic studies related to aortic diseases.

Please initial for the samples that you are consenting to donate for this study:

Saliva or "spit" can be collected from your mouth. Genetic material will be collected from these samples and used for laboratory DNA analysis.

□ Yes □ No Initials _____

A small amount of **blood** (about 2 tablespoons) can be drawn from a vein in the arm. The insertion of the needle may cause slight discomfort and bruising at the site of the needle entry.

□ Yes □ No Initials _____

If you have had testing through a commercial laboratory, that laboratory may have extracted **DNA** from a blood or saliva sample sent by your physician. This DNA can be requested by the Houston Administrative Center or sent to the Houston Administrative Center at yours or your doctor's request.

□ Yes □ No Initials_____

DNA analysis and data sharing

De-identified DNA samples may be sent to a DNA sequencing laboratory for detailed analysis. Once the analysis has been completed, the information from analyses of your coded DNA sample will be put into a controlled-access database at the National Institute of Health (NIH) called dbGaP (database for genotypes and phenotypes). This is a data repository that contains

genetic information, along with de-identified clinical information including your race, gender, age, and personal and family history of aortic disease and related conditions. This database is accessed by qualified researchers through the internet, but the information in this database will be available only to researchers who have received approval from the NIH Data Access Committee. Traditionally-used identifying information about you, such as your name, address, or telephone number will NOT be put into this database.

☐ Yes ☐ No Initials_____

BENEFITS:

The research done using your information may not help you directly or benefit you personally, medically or financially. However, the information you provide for research may improve the diagnosis, management and treatment of people who have the same condition as you and/or your family.

KNOWN RISKS:

Physical Risks

If a blood sample is taken from you, there are very few risks of physical injury. Possible effects of a blood draw include mild pain, bleeding, bruising and infection at the site of the needle insertion. Fainting or light-headedness can sometimes occur but usually lasts for only a few minutes

Psychological and social risks associated with loss of privacy

The greatest risk of sharing your medical and genetic information is the possible loss of your privacy. Although no identifiable information (name, address, etc.) will be given to the National Institutes of Health (the federal government agency that will store your child's genetic information), the possibility exists that your genetic information may be taken, used for reasons outside of this project and linked back to you. If your genetic information is linked back to you in the future, it may be used by employers and insurance agencies to discriminate against you, or by law enforcement to link you (or your family member) to a crime.

If you are part of a small community or a special group of people, your genetic information may be used to draw conclusions about your community or group. Your information may also be used to increase the information available about genetic differences between groups or communities. Genetic differences that cause health problems can lead people to have negative ideas about certain groups or communities.

New Information

It is possible during our analysis of your DNA that we may identify information about you that was previously unknown, such as inherited risk for a disease known at the time of testing to likely cause premature death if untreated. Should such life-threatening results be uncovered

through this study, you will be notified via telephone or certified mail. Genetic counseling will be provided to you and your family members at no cost to explain these results. There are no plans to return individual results that are not clinically actionable (i.e. treatment or screening is not available) or non-disease causing. There are no plans to return results from data deposited in the NIH dbGaP repository to you, Dr. Milewicz or the MAC.

New findings gained during the course of this research project will be published in medical journals. You or your doctors may access information about new findings and published articles through the MAC website.

STUDY WITHDRAWAL:

You have the right to refuse to take part in this research study without negative consequences to you or your family. You can withdraw from the study at any time by contacting Dr. Dianna Milewicz and informing her of your request to withdraw. If you withdraw, your information, including any medical records shared with or requested by the MAC Houston Administrative center, will be destroyed. De-identified data that has been deposited in databases or shared with investigators and analyses that were done before the request cannot be removed. However, no further data collection will be done and any remaining sample will be destroyed. Your decision to withdraw will not affect the services otherwise available to you.

IN CASE OF INJURY:

If you suffer any injury as a result of taking part in this study, please understand that no arrangements have been made to provide free treatment of the injury or any other type of payment. All needed facilities including emergency rooms and professional services will be available to you, just as they are to the community in general. You should report any injury to Dianna Milewicz at 713-500-6715 and to the Committee for the Protection of Human Subjects at 713-500-7938. You will not give up any of your legal rights by signing this consent form.

CONFIDENTIALITY:

Please understand that representatives of the University of Texas Health Science Center at Houston, the Sponsor (Genetic Aortic Disorders Association Canada), the Observational Data Safety Monitoring Board, and study personnel at the MAC Houston Administrative Center may review your research and/or medical records for the purposes of verifying research data, and will see personal identifiers. However, identifying information will not appear on records that are disclosed, with the exception of your date of birth, your initials, and treatment/service dates. You will not be personally identified in any reports or publications that may result from this study. There is a separate section in this consent form that you will be asked to sign which details the use and disclosure of your protected health information.

In publications or other summaries of study results, your data will be grouped with that of other study participants so that no one individual can be identified.

COSTS, REIMBURSEMENT, AND COMPENSATION:

There is no cost to you for taking part in this study. You will not receive payment or other compensation for taking part in this study.

QUESTIONS:

You may contact Dr. Milewicz's office at (713) 500-6715 at any time during the study if you have any questions. You can contact the study team to discuss problems, voice concerns, obtain information, and offer input in addition to asking questions about the research.

UTHealth The University of Texas Health Science Center at Houston
IRB NUMBER: HSC-MS-16-0191
IRB APPROVAL DATE: 04/29/2016

AUTHORIZATION TO USE AND DISCLOSE
PROTECTED HEALTH INFORMATION FOR RESEARCH

Patient Name:_____
Date of birth:_____

Protocol Number: ***HSC- MS-16-0191***
Protocol Title: ***The Montalcino Aortic Consortium: Precision Medicine for Heritable Thoracic Aortic Disease***
Principal Investigator: ***Dr. Dianna M. Milewicz, MD, PhD***

If you sign this document, you give permission to The University of Texas Health Science Center at Houston AND/OR Memorial Hermann Healthcare System to use or disclose (release) your health information that identifies you for the research study named above.

If you sign this document, you give permission to the researchers to obtain health information from the following health care providers (***e.g. clinical geneticist, cardiologist, cardiothoracic surgeon, vascular surgeon, and hospitals where you had related imaging or surgical procedures done***):

Name of Provider	Address of Provider	Fax Number of Provider

UTHealth The University of Texas Health Science Center at Houston
IRB NUMBER: HSC-MS-16-0191
IRB APPROVAL DATE: 04/29/2016

The health information that we may use or disclose (release) for this research includes all information in a medical record, results of physical examinations, medical history, lab tests, imaging studies or certain health information indicating or relating to your aortic or genetic condition. Any information that is disclosed will be de-identified.

The health information listed above may be used by and/or disclosed (released) to researchers and their staff. The researchers may disclose information to employees at The University of Texas Health Science Center at Houston AND/OR Memorial Hermann Healthcare System for the purposes of verifying research records. The researchers may also disclose information to the following entities:

- Sponsor (Genetic Aortic Disorders Association Canada)
- Observational Data Safety Monitoring Board

The University of Texas Health Science Center at Houston AND/OR Memorial Hermann Healthcare System is required by law to protect your health information. By signing this document, you authorize The University of Texas Health Science Center at Houston AND/OR Memorial Hermann Healthcare System to use and/or disclose (release) your health information for this research. Those persons who receive your health information may not be required by Federal privacy laws (such as the Privacy Rule) to protect it and may share your information with others without your permission, if permitted by laws governing them.

If all information that does or can identify you is removed from your health information, the remaining information will no longer be subject to this authorization and may be used or disclosed for other purposes. No publication or public presentation about the research described above will reveal your identity without another authorization from you.

Please note that health information used and disclosed may include information relating to HIV/AIDS infection; sexually transmitted diseases; treatment for or history of drug or alcohol abuse; mental or behavioral health or psychiatric care; genetic information or genetic test results.

Please note that you do not have to sign this Authorization. University of Texas Health Science Center AND/OR Memorial Hermann Healthcare System may not withhold treatment or refuse treating you if you do not sign this Authorization.

You may change your mind and revoke (take back) this Authorization at any time. Even if you revoke this Authorization, researchers may still use or disclose health information they already have obtained about you as necessary to maintain the integrity or reliability of the current research. To revoke this Authorization, you must write to:

Dr. Dianna M. Milewicz
Primary Investigator
The University of Texas Health Science Center at Houston
Address: 6431 Fannin St. MSB 6.100
Houston, Texas 77030
Fax: 713-500-0693

This Authorization will expire *six (6)* years after the end of the study.

SIGNATURES

Sign below only if you understand the information given to you about the research and you choose to take part. Make sure that any questions have been answered and that you understand the study. If you have any questions or concerns about your rights as a research subject, call the Committee for the Protection of Human Subjects at (713) 500-7943. You may also call the Committee if you wish to discuss problems, concerns, and questions; obtain information about the research; and offer input about current or past participation in a research study. If you decide to take part in this research study, a copy of this signed consent form will be given to you.

Printed Name of Subject	Signature of Subject or Legal Representative	Date

Printed Name of Person Obtaining Consent	Signature of Person Obtaining Consent	Date

CPHS STATEMENT: This study (HSC-MS-16-0191) has been reviewed by the Committee for the Protection of Human Subjects (CPHS) of the University of Texas Health Science Center at Houston. For any questions about research subject's rights, or to report a research-related injury, call the CPHS at (713) 500-7943.