PARENTAL PERMISSION AND CHILD ASSENT TO PARTICIPATE IN A RESEARCH STUDY AT CHILDREN'S MERCY HOSPITAL

Correlation of blood gene expression (TruGraf Liver) with liver biopsy in pediatric liver transplant recipients

SUMMARY (Details of this information are in the sections below)

We are asking your child to be in this research study. Being in a research study is completely voluntary, and your choice will not affect your child's regular medical care. This research study is done to see if an experimental blood test can predict rejection of a liver transplant. The following things are part of this study: blood collection during routine blood draw and a medical chart review. Being in this study will take three years and no extra visits. The biggest risks from being in this study is a breach of confidentiality. There is no direct benefit to being in this study. Instead of being in this study, your child can continue to get regular medical care.

WHO IS DOING THIS STUDY?

A study team led by Dr. Ryan Fischer is doing this study. Other health care professionals may help them.

We are asking your child to be a part of this research study. Please read the information below and ask questions about anything that you do not understand before you make a choice.

WHY IS THIS STUDY BEING DONE?

Liver transplant rejection is when the body's immune system attacks and damages the liver of a transplant recipient. Currently the best way to see if that is happening is with a liver biopsy. The purpose of this research study is to see if a simple blood test can diagnose if a transplanted liver is being rejected.

WHO CAN BE IN THIS STUDY?

We are asking your child to be a part of this research study because they have had a liver transplant.

Up to 25 children, ages 1 through 17, will be asked to be in this study at Children's Mercy Hospital.

WHAT WILL HAPPEN TO MY CHILD IN THIS STUDY?

If you decide for your child to be in this study, the following things will happen:

The study team will collect information from your child's medical record. The information collected will include the following:

- Your child's initials, date of birth, dates of service, diagnosis, medical history lab results, medications, height, weight and demographics.

- The study team will get into your child's medical record from time to time to update the information collected. This will happen because researchers may need to know how your child's health has changed over time.
- Information collected for this study will be shared with Transplant Genomics, Inc. who has developed the blood test.
- Your child's de-identified information/de-identified biospecimens could be used for future research without your additional permission.

Study Visits:

All study visits will take place at the same time as a regularly scheduled follow-up visit for your child's liver transplant care. Blood draws for the study will take place at the same time as standard blood draws for your child's care. Your child will not have any extra pokes for this study.

Blood collection:

- Blood will be taken at the same time as standard blood draw for your child's care. There will be no extra needle pokes for the study. There will be a total number of 4 blood draws of about 2 teaspoons total taken for the study. These will occur at the time of liver biopsy or any standard of care lab draw 2 weeks prior to liver biopsy, 8-12 weeks after the biopsy, 20-24 weeks after the biopsy and 28-32 weeks after the biopsy.

Your child's samples will be used only for research and will not be sold. You should know that research sometimes results in discoveries that may one day have commercial value. For example, discoveries could eventually lead to new tests, drugs, or other products. Development of new products relies on the study of samples from hundreds or thousands of people, not on any one person. If this happens, you or your child should not expect to share in any of the profits. You and your child will not receive money or other compensation for use of these samples. You will not be informed about future use or results.

- Your child's de-identified information/de-identified biospecimens could be used for future research without your additional permission.

Tests done will not benefit your child directly or change how your child's disease is treated and the results will therefore not be shared with you.

Information and/or samples collected for this study will be shared with Transplant Genomics, Inc.

FUTURE RESEARCH USE OF CLINICAL DATA AND BIOSPECIMENS

Your child is being asked to participate in a research study that involves the collection, storage and use of your child's information and biospecimens related to the study described in this Informed Consent Form. Biospecimens are samples from your child's body such as blood, which are used for research purposes. Any of your child's remaining biospecimen materials used for the purposes of the study, will be retained by Transplant Genomics, Inc (TGI) for Quality Control purposes until the end of the study.

TGI may want to utilize your child's data and/or biospecimens collected during this study for future research purposes. Scientists do research to answer important questions which might help change the way transplant patients are managed. Should you agree to allow TGI to use your child's data and/or biospecimens for future research, the data and/or biospecimens would be used to further understand how liver transplant rejection occurs and improve methods of diagnosis of rejection and its impact on survival of the transplant. The data and biospecimens will only be utilized for internal TGI research and will not be shared with researchers not affiliated with TGI.

You do not have to agree to allow TGI to use your child's data and/or biospecimens for future research. Your child's treatment by your doctor will not be affected if you decide not to allow TGI to use your child's data and/or biospecimens for future research. No extra blood draws would be required should you choose to allow TGI to use your child's biospecimens for future research. TGI will keep any leftover biospecimens in their repository. A repository is a storage bank of medical specimens.

You will be asked to mark your choice of whether to allow your child's de-identified biospecimen and data to be used for future research at the end of this form.

HOW WILL MY CHILD'S DATA OR BIOSPECIMENS BE STORED?

Your child's biospecimens will be stored in a freezer at TGIs laboratory, called a repository.

- Biospecimens will be de-identified and only include the subject number assigned to your child when they enrolled in the study. Your child's name will not be included on the specimen.
- Biospecimens may be retained for up to 10 years after the conclusion of the study, at which point they will be disposed of properly.
- Biospecimens will be stored in a tube in a -80-degree freezer in TGI's laboratory.
- TGI's laboratory will be managed and maintained by CLIA certified laboratory staff.

Your child's data will be stored in a database. A database is a collection of information stored on a computer.

- An encrypted database kept at Children's Mercy Hospital will include some identifiers, including your child's initials, date of birth and dates of service. These identifiers will be removed from the Children's Mercy database 2 years after the last patient has completed the study.
- Data sent to TGI will be de-identified and only include the subject number assigned to your child when you agreed for your child to participate in the study.
- The de-identified data sent to TGI will be stored as SAS files on TGI's server. SAS is a type of database that allows scientific researchers to accurately analyze data from research studies.
- Data sent to TGI may be retained for up to 10 years after the conclusion of the study, at which point it will be deleted from TGI's server.
- TGI will be responsible for managing all data until the time it is deleted from TGIs server.

Turning 18

If your child turns 18 before the final blood collection of study (28-32 weeks after biopsy), we will contact them to find out if they want to give consent for continued participation in this study and/or use of the information. If your child has completed the study before they turn 18, we will not attempt to contact them and all data and biospecimens collected during the study will be retained as described above.

If your child cannot be reached or does not consent, all information up to their 18th birthday will be retained.

WHAT ARE THE RISKS OF THE STUDY?

There are certain risks in this study. These risks may include someone finding out that your child was in the study.

There is a slight risk of loss of confidentiality. Your child's confidentiality will be protected to the greatest extent possible.

If your child has any of these problems or changes in the way they feel, you should tell the investigator or other study personnel as soon as possible.

There may be risks we don't know about right now. We will tell you about any new information that might change your decision to keep your child in the study.

WHAT ARE THE BENEFITS OF BEING IN THIS STUDY?

There is no direct benefit to your child from being in this research study. By being in this study, your child may help researchers find better treatments for children and adults with a transplanted liver in the future.

WHAT ABOUT EXTRA COSTS?

Although research funds will pay for some research-related items and services, we may bill your child's health insurer for routine items and services your child would have received even if your child did not take part in this research. You will be responsible for payment of any deductibles and co-payments required by your child's insurer for this routine care or other billed care. If you have any questions about costs to you that may result from your child taking part in the research, please speak with the research staff.

WHAT ABOUT CONFIDENTIALITY?

Your child has rights regarding the privacy and confidentiality of their health information. When health information includes identifiers (like names, addresses, phone numbers and social security or individual taxpayer identification (ITIN) numbers) that link it directly to an individual, it is called protected health information (PHI). Federal laws require that PHI be kept secure and private. In certain situations, federal law also requires that you approve how your child's PHI is used or disclosed. A research study is one of those situations.

By signing this permission/assent form, you are permitting the following people to have access to your child's medical record and use your child's PHI for the research purposes described in this form. You are also permitting your child's PHI to be shared with everyone listed below:

- The research team, which includes persons involved in this study at Children's Mercy Hospital;
- The Institutional Review Board at Children's Mercy Hospital;
- People from organizations that provide independent accreditation and oversight of hospitals and research;
- Government/regulatory agencies (both US and international), such as the Office for Human Research Protections whose job it is to protect human subjects and oversee the conduct of research;

The research record is separate from your child's medical record. Information about your child that is obtained during this study will be recorded in a research record and may also be recorded in your child's medical record. A research record will be created and kept in the Gastroenterology/Hepatology research office. The research record may include documents that have your child's name, assigned study ID number, medical record number, date of birth, dates of service. All research records will be maintained in a confidential manner.

There will be a separate database, in which all study information is collected. This database will be used to analyze the study information and find out the study results. Information in this database will include your child's assigned study ID number, initials, date of birth, and dates of service.
Portions of that research medical record will be sent to Transplant Genomics, Inc. This information sent to Transplant Genomics, Inc. will include your child's assigned study ID number.

By signing this permission/assent form, you are allowing your child's health information to be recorded in the research record. You are also permitting your child's research record and medical record to be shared with everyone listed above.

Some people or groups who get your child's identifiable health information might not have to follow the same privacy rules that we follow. We will share your child's health information only when we must, will only share the information that is needed, and will ask anyone who receives it from us to protect your child's privacy. However, once your child's information is shared outside of CMH, we cannot promise that it will remain private.

You may choose not to sign this permission/assent form and not have your child be in the study. You may cancel your permission to use and share your child's PHI at any time by contacting the study personnel listed on this form. You may also contact Children's Mercy Hospital Health Information Management (HIM) in writing or If you cancel your permission, your child may no longer participate in this study. Your child's PHI that has already been collected for the study may still be used; however, no new information will be collected except information related to adverse events or other safety issues.

If you do not cancel your permission, your child's PHI may continue to be recorded until the entire study is finished. This may take years. Any study information recorded in your child's medical record will be kept forever. Unless stated elsewhere in this form, you may not have access to your child's research record or research test results.

Results of this study may be made public. If made public, your child will not be identified in any publications or presentations.

WHAT ARE THE ALTERNATIVES TO BEING IN THIS STUDY?

Instead of being in this study, you or your child may choose for your child not to be in the study.

WHAT ARE MY CHILD'S RIGHTS AS A STUDY PARTICIPANT?

Being in a research study is voluntary. Your child does not have to be in this study to receive medical care. If you choose for your child not to be in this study or withdraw you child from this study, there will be no penalty or loss of benefits to which your child is otherwise entitled.

We will inform you of any new information that we find out during this study. This information may affect your decision to keep your child in the study. If you choose to withdraw your child from (quit) the study or if you are asked by your child's personal doctor to withdraw your child from the study, you must tell the study team as soon as possible.

If you withdraw your child from the study early for any reason, the information that already has been collected will be kept in the research study and included in the data analysis.

Dr. Ryan Fischer, Transplant Genomics, Inc, the Institutional Review Board or the FDA may stop the study at any time. The investigator(s), your child's doctor, or Transplant Genomics, Inc. may remove your child from the study at any time without your permission.

WHO SHOULD I CALL IF I HAVE QUESTIONS OR PROBLEMS?

Dr. Ryan Fischer is in charge of this research study. You may call Dr. Fischer at 816-234-3000 with questions at any time during the study. You may also call Corey Schurman the study coordinator, at 816-302-3076 with any questions you may have.

You should call Dr. Fischer if you believe that your child is sicker or has suffered injury of any kind as a result of being in this research study.

You may also call Children's Mercy Hospital' Pediatric Institutional Review Board (IRB) at (816) 731-7474 with questions or complaints about this study. The IRB is a committee of physicians, statisticians, researchers, community advocates, and others that ensures that a research study is ethical and that the rights of study participants are protected.

PERMISSION OF PARENT OR LEGALLY AUTHORIZED REPRESENTATIVE

The purposes, procedures, and risks of this research study have been explained to me. I have had a chance to read this form and ask questions about the study. Any questions I had have been answered to my satisfaction. I give permission for _____ to participate in this research study. A copy of this signed form will be given to me.

_____	_____	_____
Signature of Parent/Legally Authorized Representative	Date	Relationship to Participant

Making Your Choice for Optional Future Research

Please read each sentence below and think carefully about your choice. After reading each sentence, circle "Yes" or "No" and initial each item.

I agree that my child's samples and data can be used by other researchers in the future to study liver and kidney transplant.

Yes No _____ Initials

I agree that my child's blood sample collected for this study may be stored at Transplant Genomics, Inc. for up to 10 years and may be used in future research studies regarding liver and kidney transplant. I understand that the sample that is stored still contains information that may identify my child.

Yes No _____ Initials

ASSENT OF MINOR

I have been told that if I am in this study I will have extra blood drawn 4 times when I get a regular blood draw. I have been told that I don't have to be in this study. I may quit the study at any time, and no one will be mad at me. I have had a chance to discuss the study and ask questions. My questions have been answered. I agree to be in the study and do what I am asked to do as long as I continue in the study.

Making Your Choice for Optional Future Research

Please read each sentence below and think carefully about your choice. After reading each sentence, circle 'Yes" or "No" and initial each item.

1. I agree that that my blood sample and data can be used by other researchers in the future to study liver and kidney transplant.
   Yes No _____ Initials

_____ _____
Signature of Minor Date

STUDY PERSONNEL

I have explained the purposes, procedures, and risks involved in this study in detail to:

_____
Print name(s) of Parents/ Legally Authorized Representative, and

_____, who in my opinion ___ IS / ___ IS NOT capable of assenting to participate in this study.
Print child's name.

If child IS NOT capable of assenting, please state reason why:

__ Age of child:_____ (insert age)

__ Limitation in understanding based on child's condition

__ Other, please explain_____

_____ _____ _____
Signature of Person Obtaining Permission/Assent Date Time

Print Name of Person Obtaining Permission/Assent _____

INTERPRETER OR QBS

☐ Interpreter Used ☐ Qualified Bilingual Study Staff Used (QBS)

I was present and provided interpretation services during the signing of this document.

_____ _____
Signature of Interpreter or QBS Date

Printed Name of Interpreter or QBS: _____

(Must also sign the translated document)

Relationship of Interpreter or QBS to Subject, Father/Mother or Legally Authorized Representative:_____