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

The Role of Exhaled Nitric Oxide (FeNO) and Urinary 3-Bromotyrosine (BrY) in Eosinophilic Esophagitis: Pilot Study to Evaluate the Correlation of FeNO, BrY and Esophageal Eosinophils

WHO IS DOING THIS STUDY?

A study team led by Rachel Chevalier 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?

This study is being done to learn more about helping children who have the diagnosis of eosinophilic esophagitis (EoE). EoE is a condition where a type of white blood cell, eosinophils, invades the wall of the esophagus, the tube that connects the mouth to the stomach. Currently, children have a biopsy, where we take a small piece of the swallowing tube to look at under the microscope to help diagnose this condition. Our goal is to find different ways to provide a diagnosis of eosinophilic esophagitis while avoiding invasive methods.

We intend to see if a machine or urine testing, that are currently used to help manage asthma, may be helpful to use to diagnose EoE. The machine is called NIOX MINO. It measures the amount of nitric oxide in the breath of a patient who simply blows into a mouthpiece. Nitric Oxide is a normal gas in our lungs that we can measure to give us an idea of how healthy the lungs are. Urinary BrY has also been shown to be a product made by eosinophils. It can be measured in the urine. Adding urinary BrY to Fractional exhaled nitric oxide may provide an added tool to help us diagnose EoE. This potentially replaces the need for more invasive procedures to diagnose and monitor disease activity and improves overall patient care.

WHO CAN BE IN THIS STUDY?

We are asking your child to be in this study because he or she has symptoms of vomiting, difficulty with swallowing food, reflux symptoms, or chronic abdominal pain and is scheduled to have biopsies of the esophagus as part of routine care.

About 200 children and adolescents, 6 to 21 years old, will be asked to be in this study at The Children's Mercy Hospital.

WHAT WILL HAPPEN TO MY CHILD IN THIS STUDY?

Being in this study involves providing a breath sample and urine sample. Your child will be asked to blow into the NIOX machine for about 10-15 seconds. We may ask your child to repeat the process if he/she is not able to provide an adequate sample. We will also ask for a clean urine sample, this is to get urine (pee) that is free of bacteria, which should take 5 minutes. If your child has to have a second biopsy at a later time, we will ask for your child's participation in this study again.

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

Collecting Information:

- Your child's participation will involve collecting information.
- You or your child does not have to give any information to the study that you do not want to give. By signing this form you are authorizing the collection and use of the information outlined above.
- If you choose for your child to participate, the study team will collect information from your child's medical record. The information collected will include the following:
 - o Diagnosis and lab results of urine sample and FeNO
 - o Your child's biopsy results.

Clinic Visit:

- Before your child is prepared for the biopsy, he/she will be asked a few questions about his/her allergy history.
- Your child's medical records may be reviewed to assess his or her health.
- Participation will increase your visit time by approximately 15 minutes.
- Tests done will not benefit your child directly or change how your child's disease is treated.

Testing:

- He/she will then blow twice into a plastic tube connected to the NIOX MINO machine for approximately 10-15 seconds each time. This will be done before the biopsy procedure. This study will take about 10 minutes to do.
- A urine sample will then be collected from your child by clean catch procedure which should take about 5 minutes.

Procedure:

- We will direct your child to a private restroom and give you or your child a specimen cup.
- We will ask that your child wash his/her hands with soap.
- O You or your child is to clean their genital area with a towelette provided.
- o After a urine stream is established in the toilet, urinate into the cup.
- o Fill the cup half way (if possible) and remove the cup from the urine stream.
- o Pass the remaining urine into the toilet.
- Screw the lid on the specimen cup tightly (without touching the inside of the cup or lid).
- We will collect the cup from you or your child.
- This study will be done before the biopsy procedure and will take about 15 minutes to do. Then after the biopsy has been obtained, the results of the biopsy will be recorded for the study purposes.

WHAT ARE THE RISKS OF THE STUDY?

There are no anticipated risks with breathing out into this machine other than a feeling of light-headedness if your child blows too hard. There is no anticipated risk with collection of urine. If your child has any problems or changes in the way he or she feels, 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 may be no direct benefit to your child from being in this study. By being in this study, your child may help other children who have the diagnosis of eosinophilic esophagitis. This study may contribute to medical knowledge that may give us another option to endoscopic biopsy for the diagnosis or management of this disease.

WHAT ABOUT EXTRA COSTS?

You will not have to pay anything extra if your child is in this study. The breathing test and urine sample will be paid for by the study. You or your child's insurance company will still have to pay for all of your child's treatment that is not part of this study, including the biopsy.

WHAT ABOUT CONFIDENTIALITY?

Your child has rights regarding the privacy and confidentiality of his or her 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 of 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:

- The research team, which includes the study personnel listed on this form and other persons involved in this study at The Children's Mercy Hospital;
- The Institutional Review Board at The Children's Mercy Hospital;
- Federal agencies such as the Office for Human Research Protections

Information about your child that is obtained during this study will be recorded in a research record. This record will include the assigned study ID number, results of the breathing test and the biopsy results. This record will not have any unique personal identifiers.

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

We will also keep a research file that stays in the Allergy/Immunology research office. That file may include documents that have your child's name and medical record number, date of birth and date of study procedure.

The persons and groups listed above are required by federal law or by contract to keep any PHI in your child's research record secure and private. While confidentiality cannot be guaranteed, it will be protected to the greatest extent possible. There also may be some situations where laws require the release of your child's PHI. If your child's PHI is shared with an organization that is not required to

comply with federal privacy laws, your child's health information is no longer considered protected and may be used and shared freely by that organization.

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 The Children's Mercy Hospital Medical Records Correspondence Department in writing. If you cancel your permission, your child may no longer be 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. Some information about the study may be included in your child's medical record. Any study information recorded in your child's medical record will be kept there indefinitely. 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. 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 may choose for your child not to participate. He/she will still have their scheduled biopsy done.

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 a study to receive care for his/her esophagitis. If you choose not to have your child participate, there will be no penalty or loss of benefits to which your child is otherwise entitled.

You may withdraw your child from the study at any time without penalty or loss of benefits to which your child is otherwise entitled. Data collected before your child withdraws will be kept and used.

WHO SHOULD I CALL IF I HAVE QUESTIONS OR PROBLEMS?

Dr. Rachel Chevalier is in charge of this study. You may call her at (816) 234-3066 with questions at any time during the study. You may also call a study coordinator at 816-302-3079 with any questions you may have.

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

You may also call Children's Mercy Hospitals' 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.

SPONSOR AND INSTITUTIONAL RESPONSIBILITIES

In the case of illness or injury resulting from this study, treatment is available at The Children's Mercy Hospital, but will be provided at the usual charge. Payment for this treatment will be your responsibility. The hospital will not bill insurance or other third party payers for this care. The Children's Mercy Hospital does not have funds set aside to pay research participants if the research results in injury. By signing this form, you, or your child, are not giving up any legal rights to seek compensation for injury.

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.
Optional Future Research Contact: 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 that my child's lab results and clinical information be used by other researchers in the future to study eosinophilic esophagitis. Yes No Initials
Signature of Parent/Legally Authorized Representative Date Relationship to Participant

ASSENT OF MINOR

I have been told that if I am in this study I will have to blow into the NIOX MINO machine for 10-15 seconds and provide a urine sample. 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.
I agree that that my lab results and clinical information can be used by other researchers in the future to study eosinophilic esophagitis. Yes No Initials
Cinceton of Minor
Signature of Minor Date
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