Cover Page

Official Title of Study:	Pilot study of at-home ammonia monitoring in patients with an inborn error of ammonia metabolism
NCT:	Not available
Date*:	8/13/2024

*date of last approval by IRB

OREGON HEALTH & SCIENCE UNIVERSITY

MED. REC. NO. _____
NAME _____
BIRTHDATE _____

IRB#: 00025898____

CLINICAL RESEARCH CONSENT AND AUTHORIZATION SUMMARY OF KEY INFORMATION ABOUT THIS STUDY

TITLE: Pilot study of at-home ammonia monitoring in patients with an inborn error of ammonia metabolism

PRINCIPAL INVESTIGATOR: Amy C. Yang, M.D. (503) 494-8307

We are asking you to join a research study. This consent form contains important information to help you decide if you want to join the study or not.

PURPOSE:
This study is to learn more about your willingness to measure your blood ammonia every day. We will study people with a genetic condition that causes high blood ammonias. inborn error of ammonia metabolism. We will study how your daily fasting blood ammonia levels as measured by an at-home device, using a fingerstick, correlate with your overall health.

DURATION:
You will complete 3 study visits over 8 months. Study visits will last up to 3 hours. You can participate in an optional 6 month extension of the study, for a total 14 months. If you participate in the optional extension there will be a 4th study visit. During the study you will be asked to measure a few things each day. We will follow your health through review of your medical record and follow up phone calls for up to one year following completion of the study.

PROCEDURES:
- At the study visits, you will complete surveys. At the study visits, you will have your blood drawn from your vein. At the study visits, you will have your blood collected from a fingerstick.
- At home, you will measure your temperature, blood oxygen levels, and heart rate every day.
- At home, for 6 months you will measure a fingerstick blood in the study device every day.
- You may choose to participate in additional 6 month period to continue measuring at home after the first 8 months are done.

RISKS:
The main expected risk is pain and discomfort from collecting blood samples.

CO1450

BENEFITS:
You will not directly benefit from taking part in this research.

ALTERNATIVES:
This is a voluntary research study. You do not have to participate in this study. If you do not, you will continue to receive your standard treatment for your disorder as currently prescribed by your doctor.

Even if you decide to join now, you can change your mind later, and this will not affect your ongoing clinical care. Please ask the Investigator if you have any questions about the study or about this consent form.

END OF CONSENT SUMMARY

OREGON HEALTH & SCIENCE UNIVERSITY

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Clinical Research Consent and Authorization Form

TITLE: Pilot study of at-home ammonia monitoring in patients with an inborn error of ammonia metabolism

PRINCIPAL INVESTIGATOR:	Amy C. Yang, M.D.	(503) 494-8307
CO-INVESTIGATORS:	Brian P. Scottoline, M.D., Ph.D.	(503) 494-8307
	Kimberly A. Kripps, M.D.	(503) 494-8307

WHO IS PAYING FOR THE STUDY?: The Eunice Kennedy Shriver National Institute of Child Health and Human Development is paying for this study. This is under award number R44HD112243 to Sequitur Health Corp. with a subcontract to OHSU.

OHSU is being compensated by the funder to conduct this study. This is to pay for tests performed only for study purposes, and for the time involved on the part of the investigator(s) and study staff. You may freely discuss this with your physician and the investigator if you have concerns.

Your study doctor and the research staff have no financial involvement with the funder and are not being paid directly by the funder for conducting this study.

WHY IS THIS STUDY BEING DONE?:
"You" means you or your child or ward in this consent form.

You are invited to be in this study because you have a known disorder with risk of high ammonia. Some examples of these disorders are ornithine transcarbamylase deficiency (OTC) and propionic acidemia. The purpose of this study is to learn more about your willingness to measure your blood ammonia every day.

The study device offers new capability to measure ammonia at-home from a small fingerstick blood drop.

The study device is experimental. It has not been approved by the FDA because we do not know enough about its use at-home. You will not be able to see any individual measurements from the study device. No medical decisions will be made from study device measurements.

CO1450

This study has 3 visits to the clinic. The study will take 8 months to complete. The study has an optional 6 months extension period and 4th study visit.

This study does not involve any genetic research. Your existing genetic disorder is already documented in your medical record. We will include this information in our in de-identified study database.

Your samples will not be stored for future research.

Your de-identified results from this research may be used in future studies.

Up to 30 participants may be enrolled into this study at OHSU.

WHAT EXAMS, TESTS AND PROCEDURES ARE INVOLVED IN THIS STUDY?

You will complete at least three study visits at OHSU. These will include a physical exam, a blood draw, and completing some surveys. We will also ask you to tell us what you ate for the last 24 hours. We anticipate the study visits will take 1-3 hours each. If you choose to participate in the optional 6 month extension, you will have a fourth study visit.

For the entire study, you will measure your vital signs daily at home. We anticipate this will take you 3 minutes every day.

- You will measure your temperature with a thermometer.
- You will measure your resting heart rate and blood oxygen level with a pulse oximeter.

For the entire study, you will report if you have any symptoms of high ammonia or general illness. We anticipate this will take 1 minute per day.

High Ammonia Symptoms

- Mood swings, irritability
- Confusion or disorientation
- Excessive sleepiness or lethargy
- Vomiting
- Tremors, clumsy movements, or gait/walking abnormalities

General Illness Symptoms:

- Upper respiratory infection symptoms: Fatigue or lack of energy, fever, runny nose, cough, hoarse voice, sore throat
- Abdominal symptoms: Nausea, vomiting, diarrhea, belly pain

For the last 6 months of the study, you will use the study device at home to measure your fingerstick ammonia. You will not be able to see the results from the study device. We anticipate you will take 5 minutes every day to complete the ammonia measurement. The study device will email the results to the study team. To complete the measurement you will clean your finger, use a lancet (a small sterile needle) to prick the cleaned skin, and then collect the blood sample in a small tube that you use to apply to the cartridge.

At the end of the 8 month study, you may choose to continue to participate in a 6 month extension study.

You will talk with a member of the study team once per week over the phone.

You shall not to share the use of the device with anyone else. You will only use the device for yourself for this study.

You will keep the study device private confidential. You may not disclose photos, drawings, and descriptions of the study device, cartridges, or instruction manual for the study device to anyone outside of this study.

Below is a summary of the content and anticipated length of the study visits.

Schedule of Study Visits

	Screening + Enrollment Visit	Ammonia Monitoring Start Visit	End of Study Visit	End of Extension Study Visit (optional)
Day	Day 1	Day 60 ± 10	Day 240 ± 10	Day 420 ± 10
Consent or continued consent discussion	X	X	X	X
Medical history obtained, reviewed, or updated	X	X	X	X
24 hour dietary recall	X	X	X	X
Blood draw (1/2 teaspoon)	X	X	X	X
Fingerstick (2 drops)	X	X	X	X
Surveys	X	X	X	X
Total time	3 hours	3 hours	1 hour	2 hours

We will review your medical record history and collect information. We will record your disorder diagnosis, your past clinical laboratory measurement results, your prior hospitalizations, relevant details from previous clinical visits related to your disorder, and your prescribed treatment plan.

In the future, your de-identified data from this study may be given to other researchers for use in other research studies. The information will be de-identified as described in the **WHO WILL SEE MY PERSONAL INFORMATION?** section.

WILL I RECEIVE RESULTS FROM THE TESTING IN THIS STUDY?

You will be able to see all clinical laboratory measurements from your participation in this study. We will place these in your medical record. We do not anticipate any incidental findings from this study.

You will not be able to see any individual measurements from the study device. You will connect the study device to your wireless internet at home. The study device will email the results from to your care team. No medical decisions will be made from study device measurements.

We plan to publish the aggregated results from all the participants in this study in a scientific journal sometime after the study is completed. We will share this publication with you. The aggregated results from this study will be used in reports to the National Institutes of Health, the funder of this study.

We may use the aggregated results from this study in future regulatory submissions to agencies such as the U.S. Food and Drug Administration.

We may re-contact you after the study is complete for up to 1-year.

WHAT RISKS CAN I EXPECT FROM TAKING PART IN THIS STUDY?:

There is a risk of discomfort during blood sampling for the study. We will draw blood from a vein during the study visits. We will also take a fingerstick blood sample during the study visits. You may feel some pain during blood draw or fingerstick. There is a small chance the needle or lancet will cause bleeding, a bruise, an infection, or fainting. You may also experience psychological risks from the study procedures (i.e. blood sample collection) both during the collection and in the future such as fear, anxiety, and changes to relationship with person collecting samples.

There is a risk that the study device will not work as expected. If the study device electronics are not working, the device will not allow you to complete a measurement.

You may experience potential unanticipated psychological risks, such as fear/ anxiety from abnormal or incorrect blood ammonia measurements from the device or abnormal laboratory values. This is because the study device is new and has not been used by anyone at home before. We are not certain if this device will help or make it more difficult for you to take care of your health.

There is a small risk of experiencing discomfort while completing the study surveys. You will complete some quality-of-life surveys, answer questions about your previous experience with your ammonia disorder, and answer questions about your experience with the study device. Some of these questions may seem very personal or embarrassing. They may upset you. You may refuse to answer any of the questions that you do not wish to answer. If the questions make you very upset, we will help you to find a counselor.

There is a small risk of loss of confidentiality from a data breach. We have made efforts to protect your identity and de-identify your data collected in the study. However, it might be possible that the information we will gather about you as part of this study could become available to an insurer or an employer, or a relative, or someone else outside the study.

You may experience some risk we do not expect because we are still learning about the study device.

WHAT ARE MY CHOICES IF I DECIDE NOT TO TAKE PART IN THIS STUDY?

You may choose not to participate in this study. The alternative is not to use the study device. If you are not in the study, nothing will change about your standard medical management.

You will not benefit from participating in this study. However, by serving as a participant, you may help us learn how to benefit patients in the future. You should discuss the risks and benefits of participation in this study with your usual metabolic genetics team member. You do not need not participate in the research study to receive your standard treatment for your condition.

WHO WILL SEE MY PERSONAL INFORMATION?

We will take steps to keep your personal information confidential, but we cannot guarantee total privacy. You are given a unique study identifier code that only we, the study personnel know. We keep the information connecting your code to your name in a secured location. Your name is not stored directly with any of the data collected from this study.

We will create and collect health information about you as described in the WHY IS THIS STUDY BEING DONE? and the WHAT EXAMS, TESTS AND PROCEDURES ARE INVOLVED IN THIS STUDY? sections of this form. Health information is private and is protected under federal law and Oregon law. By agreeing to be in this study, you are giving permission (also called authorization) for us to use and disclose your health information as described in this form.

The investigators, study staff, and others at OHSU may use the information we collect and create about you in order to conduct and oversee this research study and store it in a de-identified data repository for potential future research.

We may release this information to others outside of OHSU who are involved in conducting or overseeing research, including:

- The funder of this study, The Eunice Kennedy Shriver National Institute of Child Health and Human Development under award R44112243, and the funder's representatives, and the prime awardee and supplier of the study device, Sequitur Health Corporation.
- The Food and Drug Administration.
- The Office for Human Research Protections, a federal agency that oversees research involving humans.
- Arizona State University and Mayo Clinic, who each own part of Sequitur Health Corporation.

Those listed above may also be permitted to review and copy your records, including your de-identified medical records.

We may also share your de-identified data from this study with other researchers, who may use it for future research studies, such as the Urea Cycles Disorders Consortium (UCDC). All identifying information about you will be removed from the information before it is released to any other investigators.

We will not release information about you to others not listed above, unless required or permitted by law. We will not use your name or your identity for publication or publicity purposes, unless we have your special permission.

Under Oregon law, suspected child or elder abuse must be reported to appropriate authorities.

OHSU complies with Oregon state requirements for reporting certain diseases and conditions to local health departments.

When we send information outside of OHSU, it may no longer be protected under federal or Oregon law. In this case, your information could be used and re-released without your permission. However, we will only share de-identified information outside of OHSU.

We may continue to use and disclose your de-identified study information as described above indefinitely.

Some of the information collected and created in this study may be placed in your OHSU medical record. While the research is in progress, you may or may not have access to this information. After the study is complete, you will be able to access any study information that was added to your OHSU medical record. If you have questions about what study information you will be able to access, and when, ask the investigator.

WILL ANY OF MY INFORMATION FROM THIS STUDY BE USED FOR ANY COMMERCIAL PROFIT?

Information about you or obtained from you in this research may be used for commercial purposes. This includes future commercialization of the study device developed by Sequitur Health Corp., which could result in a possible financial benefit to that company. There are no plans to pay you if this happens. You will not have any property rights or ownership or financial interest in or arising from products or data that may result from your participation in this study. Further, you will have no responsibility or liability for any use that may be made of your information.

WHAT ARE THE COSTS OF TAKING PART IN THIS STUDY?

Some of the services or items in this study are part of the regular treatment for your condition. These would be performed or used even if you were not in this study. The costs for these services or items will be billed to your insurance. You will be responsible for any costs your insurance does not cover. If you have any questions about these costs, or what out-of-pocket expenses you may be responsible for, contact your insurance company. If you are uninsured, you will be responsible for these costs.

You will not be billed for the costs of any services or procedures that are required by the study but are not considered part of your regular treatment.

You will not be billed for the costs of the study device and consumables; these are paid for by the National Institutes of Health for the study.

WHAT HAPPENS IF I AM INJURED BECAUSE I TOOK PART IN THIS STUDY?:
If you believe you have been injured or harmed as a result of participating in this research and require treatment, contact Dr. Amy Yang or the clinical team 503-494-8307.

If you are injured or harmed by the study device you will be treated. OHSU, Sequitur Health Corp., and the National Institutes of Health do not offer any financial compensation or payment for the cost of treatment if you are injured or harmed as a result of participating in this research. Therefore, any medical treatment you need may be billed to you or your insurance. However, you are not prevented from seeking to collect compensation for injury related to negligence on the part of those involved in the research. Oregon law (Oregon Tort Claims Act (ORS 30.260 through 30.300)) may limit the dollar amount that you may recover from OHSU or its caregivers and researchers for a claim relating to care or research at OHSU, and the time you have to bring a claim.

If you have questions on this subject, please call the OHSU Research Integrity Office at (503) 494-7887.

This federally funded study also does not have the ability to provide compensation for research-related injury. If you are injured or become ill from taking part in this study, it is important to tell your study doctor. Emergency treatment may be available but you or your insurance company will be charged for this treatment.

WHERE CAN I GET MORE INFORMATION?
If you have any questions, concerns, or complaints regarding this study now or in the future, contact Dr. Amy Yang or other team members at (503) 494-8307**.**

This research has been approved and is overseen by an Institutional Review Board ("IRB"), a committee that protects the rights and welfare of research participants. You may talk to the IRB at (503) 494-7887 or irb@ohsu.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research participant.
- You want to get more information or provide input about this research.

You may also submit a report to the OHSU Integrity Hotline online at https://secure.ethicspoint.com/domain/media/en/gui/18915/index.html or by calling toll-free (877) 733-8313 (anonymous and available 24 hours a day, 7 days a week).

WHAT ARE MY RESPONSIBILITIES IN THIS STUDY?
We will ask you to:

1) Not disclose photos, drawings, and descriptions of the study device, cartridges, or instruction manual for the device to anyone outside of this study.
2) Participate in in-person study visits. This will include completing surveys, a physical exam, blood draws, and remembering what you ate for the last 24-hours.
3) Complete short daily surveys about your vital signs and any symptoms of general illness.
4) Use the study device every morning for at least 6 and up to 12-months. This means taking a fingerstick blood sample.
5) Answer the phone when the clinical team calls every week.
6) Call the clinical team if having symptoms of high ammonia.

DO I HAVE TO TAKE PART IN THIS STUDY?

Your participation in this study is voluntary. You do not have to join this or any research study. You do not have to allow the use and disclosure of your health information in the study, but if you do not, you cannot be in the study.

Your health care provider may be one of the investigators of this research study and, as an investigator, is interested in both your clinical welfare and in the conduct of this study. Before entering this study or at any time during the research, you may ask for a second opinion about your care from another doctor who is in no way involved in this project. You do not have to be in any research study offered by your physician.

IF I DECIDE TO TAKE PART IN THIS STUDY, CAN I STOP LATER?

If you do join the study and later change your mind, you can quit at any time. You have the right to withdraw your authorization to use and disclose your health information. If you choose not to join any or all parts of this study, or if you withdraw early from any or all parts of the study, there will be no penalty or loss of benefits to which you are otherwise entitled, including being able to receive health care services or insurance coverage for services. Talk to the investigator if you want to withdraw from the study.

If you no longer want your health information to be used and disclosed as described in this form, you must send a written request or email stating that you are revoking your authorization to:

Dr. Amy Yang
3181 SW Sam Jackson Park Road, L103
Portland, OR 97239
yangam@ohsu.edu

Your request will be effective as of the date we receive it. However, health information collected before your request is received may continue to be used and disclosed to the extent that we have already acted based on your authorization.

If you withdraw from the study after you have received study device you will be required to immediately return the study device and all unopened and unused consumables. You will be asked to complete the final survey, but you may refuse.

The information we will collect from you will be provided to the funder. It will be stored with a coded identifier to protect your privacy. Once provided to the funder, we will not be able to destroy your data if you decide in the future you do not wish to participate in the research.

You may be removed from the study if the investigator or funder stops the study, you develop serious adverse events, or you cannot follow study instructions.

You will be removed from the study if you disclose photos, drawings, and descriptions of the study device, cartridges, or instruction manual for the device to anyone outside of this study.

We will give you any new information during the course of this research study that might change the way you feel about being in the study.

A description of this clinical trial will be available on http://www.ClinicalTrials.gov, as required by U.S. law. This web site will not include information that can identify you. At most, the web site will include a summary of the results. You can search this web site at any time.

SIGNATURES:

Your signature below indicates that you have read this entire form and that you agree to be in this study.

Your signature below indicates that you agree to keep the study device confidential and will not disclose any information about the study device to anyone other than the entities listed in **WHO WILL SEE MY PERSONAL INFORMATION?**.

We will give you a copy of this signed form.

Participant Printed Name	Participant Signature	Date
Parent or Legally Authorized Representative Printed Name	Parent or Legally authorized representative Signature	Date
Parent or Legally Authorized Representative Printed Name	Parent or Legally authorized representative Signature	Date
Person Obtaining Consent Printed Name	Person Obtaining Consent Signature	Date