

RESEARCH SUBJECT INFORMATION AND CONSENT FORM

TITLE: Evaluation of Novel Biomarkers from Acutely Ill Patients at Risk for Acute Kidney Injury

PROTOCOL NO.: AST-111
WIRB[®] Protocol #20101176

SPONSOR: Astute Medical, Inc.
San Diego, California
United States

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United States

**STUDY-RELATED
PHONE NUMBER(S):** Danielle Davison, M.D.
202-715-4089
202-494-8600 (24 hours)

In this consent form, “you” always refers to the subject. If you are a Legally Authorized Representative (LAR), please remember that “you” refers to the study subject.

General Information

You are being asked to participate in this clinical research study because you are a patient in the Intensive Care Unit (ICU) or expected to be in the ICU and you may be at risk for kidney injury. Before agreeing to participate in this research study, it is important that you read this consent form. It describes the purpose, procedures, benefits, known risks and discomforts of this study. You should take part in the study only if you want to do so.

If this consent form contains any words or statements that you do not understand, please ask your study doctor or a member of the study staff to explain them. You may take home an unsigned

copy of this consent form to think about or discuss with family or friends before making your decision.

Please tell the study doctor or study staff if you are currently taking part in another research study.

If you have a Legally Authorized Representative because you are unable to consent for yourself at this time, the study staff will discuss the study with you if you become alert at any time during the study period. If you are represented by a Legal Representative, you will be informed of who signed this consent form and that you have a right to withdraw.

Source of Funding

This study is being funded by Astute Medical, Inc. Astute Medical, Inc. will pay your study doctor or the institution to cover costs related to performance of this research.

Purpose of Study

The purpose of this study is to look for new biomarkers in blood and urine that might be related to kidney damage caused by an acute illness or infection. Biomarkers are substances that are found in blood or tissue that may be used to indicate or measure the effects or progress of a disease, illness, or condition.

Approximately 1000 subjects who are acutely ill in the Intensive Care Unit (ICU) who might be at risk for kidney injury are expected to enroll in this study at approximately 30 centers in the United States and in Europe. We will enroll approximately 50 subjects at the GWUH.

If you are enrolled in this study, the entire length of your participation will be up to 30 days while you are in the hospital (or less depending on date of hospital discharge). In addition, there are telephone follow-up calls at months 1, 3 and 9.

Study Visits and Procedures

Screening

If you agree to take part in this study, you will be asked to sign this consent form and a member of the study staff will review your medical history (including your laboratory test results and medications). This information will be used to determine if you are eligible to take part in the study.

Baseline

If you qualify for the study and are enrolled, the study staff will collect your demographics, medical history and laboratory tests related to your baseline kidney function. Health factors, such as blood transfusions, diuretic use, infections and surgeries for kidney injury will be

collected from information in your medical history from the previous 5 days. Your medication use will be collected from the previous 30 days. Laboratory tests related to your kidney function will be collected from the previous 6 months. These laboratory tests would have been taken as part of your routine care.

The study staff will also collect information regarding the date and time of your hospital and ICU admission.

Fluid intake and urine output will be recorded 24 hours before baseline, if available.

Study Blood and Urine Samples

The blood and urine samples will be collected and processed at the clinical site, frozen and shipped to Astute Medical, Inc. or a designated laboratory for analysis (tests). The results of this testing will not be available to any of the ICU staff, hospital or clinical study staff during the study and therefore will not impact your care.

Before your samples are shipped to the sponsor, they will be given a barcode number. The barcode number allows for your sample to be used without knowing that it is your sample by looking at the label. Bar-coded blood and urine samples will be stored at Astute Medical, Inc. in San Diego, California, and may be used for future analysis of markers for kidney damage and other diseases. The specimens and information may be kept for a prolonged period (possibly 25 years or longer).

Study Days 1-7 (Hospitalization)

The following study procedures will start on Study Day 1 (Enrollment) up through Study Day 7, OR until you are discharged from the hospital (whichever comes first):

- Study Days 1-4: Blood samples (approximately 1 tablespoon) and urine samples (approximately 3 tablespoons) will be collected twice a day during Days 1-4. Study staff will also record the daily fluid intake and hourly urine output while you are in the ICU with a urinary catheter (narrow tube) in place.
- Study Days 5-7: Blood samples (approximately 1 tablespoon) and urine samples (approximately 3 tablespoons) will be collected once a day while you are in the hospital. Study staff will also record the daily fluid intake and daily urine output while you are hospitalized.

If you are discharged from the ICU before the end of Study Day 4, but remain hospitalized, blood and urine samples will only be collected once a day.

Additional laboratory test information and health factors (for example diuretic use, surgeries, blood transfusions) may be collected during your hospital stay. These laboratory tests and health factors are included as part of your standard care.

Study Period (Up to Study Day 30 or Hospital Discharge)

Study staff will collect the results from additional information related to your kidney function and medical status. They will also record additional laboratory test findings that were taken as part of your standard care and health factors such as infections and any major medical event. These results will be recorded through Study Day 30, OR until you are discharged from the hospital (whichever comes first).

Follow-up (Months 1, 3, and 9)

The study staff will attempt to contact you or a family member/caregiver at months 1, 3 and 9 (after your current hospitalization) to check on your health status. This will be done by the use of a survey over the phone. If you choose not to participate in this telephone survey, you can decline to participate at that time. If you have returned to the hospital after your discharge, the study staff may review your medical records for information about your additional hospital stay(s).

Optional Study Procedures:

The following study procedures are considered optional and you are not required to participate in these additional procedures. Please indicate if you would or would not like to participate in these optional study procedures by marking YES or NO next to each optional study procedure and providing your initials. Unless hospitalized, these procedures will be conducted by a healthcare nurse provided by a company named Hooper Holmes contracted by Astute Medical Inc. at your home/residence:

OPTIONAL PROCEDURE #1: YES NO Initials _____

- At months 1, 3, and 9 the following sample will be collected:
 - Blood sample (approximately 1 tablespoon).

OPTIONAL PROCEDURE #2 - Nucleic Acid Analysis (DNA - the chemical that makes up genes): YES NO Initials _____

- At Study Days 1 and 5 the following samples will be collected:
 - Blood sample (approximately 1 teaspoon).

DNA and RNA are found in almost all cells in the body and can be collected from a sample of blood. Genes are made up of DNA. Genes use their DNA to make RNA and RNA acts as instructions to tell the body how to work. Genes are passed down from parents to children. If a gene (or genes) changes it is called a mutation. Some mutations are linked to medical disorders. Researchers are trying to understand which mutations are related to medical disorders. In this study, all DNA or RNA analyses will be done only for assessment of renal insufficiency.

Subject Responsibilities and Withdrawal Information

As a subject in this study, you will be asked to complete all visits and procedures as described above. If you wish to withdraw from the study, you should contact your study doctor or study staff.

The study doctor will still be able to use the information about you that was collected before your withdrawal from the study. Information already provided to the study sponsor cannot be withdrawn.

Potential Risks and/or Discomforts

Blood samples will be collected during this study. These will be obtained in one of two ways: (1) a needle will be inserted into a vein in your arm and small samples of blood will be taken, or (2) small samples of blood will be taken from an existing catheter (thin hollow plastic tube placed into a vein or artery in your arm). Collecting blood samples may cause fainting, and/or some pain and/or bruising at the site on your arm where your blood was taken. On rare occasions, infection may occur. You will be carefully observed for these and any other symptoms. Appropriate medical care will be given if they occur.

There are no known risks to providing a urine sample.

If you suspect that you have become pregnant, you must notify the study doctor immediately. You may not participate in the test if you are or become pregnant.

There may be risks or side effects which are unknown at this time.

New Findings

You will be told about any new information that might change your decision to be in this study. You may be asked to sign a revised consent form if this occurs.

Potential Benefits

This is not a treatment study. You will not directly benefit from the study. Future patients may benefit from the research conducted on the samples collected as part of this study.

Costs for Participation

You will not have to pay for any of the study tests. However, while you are in the study, you still need to get regular medical care. You (and/or your healthcare payer) will still have to pay for the costs of your regular medical care that are not a part of this study.

You might have unexpected expenses from being in this study. Ask your study doctor to discuss the costs that will or will not be covered by the sponsor. This discussion should include who will

pay the costs of treating possible side effects.

Payment for Participation

There will be no payment to you for participation in this study.

Commercial Issues

The sponsor has no plans to pay you for discoveries or commercial products that might result from this study or from the samples collected in this study.

Alternative to Being in the Study

This is not a treatment study. Your alternative is to not be in the study.

Injury Compensation

The researchers have taken steps to minimize the known or expected risks. In spite of all precautions, you still may experience medical complications or side effects from participating in this study. If you believe that you have been injured or have become ill from taking part in this study, you should seek medical treatment right away from GWU Hospital and/or the GWU MFA or through your physician or treatment center of choice. The reasonable medical expenses required to care and treat the research-related injury, including any injury or illness arising from the in-home collection of blood and urine by a home health care company, will be paid for by the study sponsor if the injury or illness is a direct result of the procedures required by this study and the injury or illness is not related to:

- Non-compliance with the study plan and study procedures
- Normal disease progression, and/or
- A pre-existing condition.

You also should promptly notify the study doctor in the event of any illness or injury.

There are no plans for you to receive any financial payments from GWU, GWU Hospital and/or the GWU MFA for any injuries or illnesses. You do not waive any liability rights for personal injury by signing this consent form.

Authorization to Use and Disclose Information for Research Purposes

Access to your study records will be limited to those who need the information for purposes of this study, as well as your health care providers if they need access to the information. The purposes of releasing your protected information are to collect the data (information) needed to complete the research, to properly monitor (watch) how the study is done, and to answer research questions related to the study. All records will be kept in a secure location and access will be limited to research study personnel.

Except as required by law, you will not be identified by name, social security number, address, telephone number, or any other direct personal identifier. The results of this research study may be presented at scientific or medical meetings or published in scientific journals. However, your identity will not be disclosed, unless you give the appropriate authorization.

Federal law requires hospitals, researchers and other healthcare providers (like physicians and labs) to protect the privacy of health information that identifies you. This kind of information is known as “protected health information” or “PHI”. This section tells you your rights about your protected health information in the study. This section also lists who you let use, release, and get your protected health information. You are free to not allow these uses and releases by not signing this consent form. If you do that though, you cannot participate in the study.

Protected health information that may be used and released (disclosed) in this study includes information such as:

- This consent form;
- Demographic information (like your age, gender, weight and height);
- Your history of chronic conditions, such as heart, kidney, liver and lung disease, or other significant conditions including surgeries and cancer;
- Laboratory results obtained on specimens collected from you (like blood, urine, tissue) related to your medical condition;
- Medical images like x-rays, CT scans, and MRIs;
- Admissions information, such as your symptoms and complaints on arrival to the hospital;
- Medications given to you during your hospitalization;
- Significant medical events that occur during your hospital stay.

By signing this consent form, you allow the use, sharing, copying, and release of your protected health information to carry out the study by:

- Your healthcare providers (like doctors and hospitals) which are not part of the study.
- The study doctor and her research team.

You also allow the study doctor and her research team, and other healthcare providers that are part of the study to release your health information to:

- GWU Institutional Review Board (IRB) or its authorized representatives, as well as representatives of the Office for Human Research Protections (OHRP) who may review your records to ensure that your rights as a research subject are protected;
- The U.S. Food and Drug Administration (FDA);
- Medical Faculty Associates, Inc.
- Western Institutional Review Board[®] (WIRB[®]);

- The sponsor of the study and any contractors or partners it may have (research monitors and auditors);
- clinical staff who are not involved in the study who may become involved in your care, if it might be relevant to your care; and
- GWU, GWUH, or MFA workforce who are involved with the research.

You may request to review or have a copy of your personal health information collected during this study and placed in your medical record. This right to review and copy your personal health information only extends to information that is placed in your medical record; it does not extend to information that is placed in your research record.

This permission does not end unless you cancel it, even if you leave the study. You can cancel this permission any time. Such cancellation will not affect information a healthcare provider has already used in reliance on your permission to do so. Even if you cancel this authorization, the researchers may still use and disclose protected health information they already have obtained about you as necessary to maintain the integrity or reliability of the research. However, no new PHI will be collected from you after you revoke your authorization.

To cancel your authorization, you will need to send a letter to your study doctor. This letter must be signed and dated and sent to this address: Dr. Danielle Davison, 900 23rd Street, Northwest, Suite G-105, Washington District of Columbia, 20037. A copy of this revocation will be provided to the study doctor and her research team. Not signing this consent form or later canceling your permission will not affect your health care treatment outside the study, payment for health care from a health plan, or ability to get health plan benefits.

Your protected health information will be treated confidentially to the extent permitted by applicable laws and regulations. Federal law may allow someone who gets your health information from this study to use or release it in some way not discussed in this section and no longer be protected by the HIPAA Privacy Rule.

By signing this consent form you authorize the study doctor and members of the research team to use and share with others (disclose) your PHI for the purpose of this study. If you do not wish to authorize the use or disclosure of your PHI, you cannot participate in this study because your PHI is necessary to conduct this study. If you choose not to be in the study or if you refuse to sign the consent form, it will not make a difference in your medical care and it will not change your eligibility for any health benefits to which you were otherwise entitled.

Voluntary Participation/Withdrawal

Your participation in this study is voluntary. You may decide not to participate or you may leave the study at any time. Your decision will not result in any penalty or loss of benefits to which you are entitled.

In addition, the study staff, Astute Medical, Inc., or the institution may stop you from taking part in this study at any time without your consent for any of the following reasons:

- if it is in your best interest;
- if you do not follow the study rules;
- if the study is stopped;
- you do not later consent to any future changes that may be made in the study plan;
- or for any other reason.

Whom to Contact to Ask Questions About Your Rights as a Research Subject

If you have any questions, concerns or complaints about the study, your participation in the study, or if at any time you feel you have had a research-related injury, please contact Dr. Davison or the study staff at 202-715-4089 during regular hours and at 202-494-8600 after hours (24 hours).

If you have questions about your research rights or if you have questions, concerns or complaints about the research, you may contact:

Western Institutional Review Board® (WIRB®)
3535 Seventh Avenue, SW
Olympia, Washington 98502
Telephone: 1-800-562-4789 or 360-252-2500
E-mail: Help@wirb.com

WIRB is a group of people who perform independent review of research.

WIRB will not be able to answer some study-specific questions, such as questions about appointment times. However, you may contact WIRB if the research staff cannot be reached or if you wish to talk to someone other than the research staff.

Do not sign this consent form unless you have had a chance to ask questions and have received satisfactory answers to all of your questions.

If you agree to be in this study, you will be given a copy of this signed and dated consent form.

Subject's Consent to Participate

I have read the above information, I have been given the opportunity to ask questions, and my questions have been answered to my satisfaction. By signing this consent form, I voluntarily consent to participate in this research study.

By signing this consent form, I have not given up any of my legal rights.

Consent Instructions:

Consent: Subjects able to provide consent must sign on the subject line below.

Consent is provided by the Legally Authorized Representative for subjects unable to consent.

Subject's Name (Please Print)
(if no Legally Authorized Representative
is used)

Subject's Signature

Date

OR

Legally Authorized
Representative's Name (Please Print)

Legally Authorized
Representative's Signature

Date

Authority of Subject's Legally Authorized Representative or Relationship to Subject

Name of Person Conducting
Informed Consent Discussion
(Please Print)

Signature of Person
Conducting Informed Consent
Discussion

Date