BIOMEDICAL RESEARCH ALLIANCE OF NEW YORK
Kings County Hospital Center

SUBJECT INFORMATION AND INFORMED CONSENT FORM

Protocol Title:	Stroke Hyperglycemia Insulin Network Effort (SHINE) Trial
Protocol #:	SHINE/12-02-260
Sponsor:	NINDS
Principal Investigator:	Jennifer Martindale, MD Ethan Brandler, MD
Institution:	Kings County Hospital Center
Address:	451 Clarkson Avenue, Brooklyn NY 11203
Telephone:	718-245-3141

HHC#: _____

INTRODUCTION

You are being asked to be a subject in a research study because you've had a stroke and you have high blood sugar. This consent form explains the research study. Before you agree to be in this study, you need to know why the research is being done, what it will involve and the risks and benefits. Ask the study doctor and study staff to explain anything in this form or about the study that is unclear. Please take time to read this information carefully. Feel free to discuss it with your family, friends and your primary care doctor. If you agree to be in the research study, you'll have to sign this consent form.

DISCLOSURE OF FINANCIAL INTERESTS

The University of Virginia is given money by the National Institutes of Health – National Institute of Neurological Disorders and Stroke is giving money to SUNY Downstate Medical Center for each study patient.

Dr. Rattan Juneja, the study endocrinologist from Indiana University, may make money from the commercial sales of the GlucoStabilizer. The terms of this arrangement have been reviewed and approved by Indiana University. A management plan is in place in accordance with its conflict of interest policies.

PURPOSE OF THE STUDY

High blood sugar levels during a stroke can cause more brain damage than normal blood sugar levels. Blood sugar levels can be lowered with insulin, often given to diabetics. Insulin can either be given as a shot under your skin or into a vein in your arm through a tube called an IV. This study will find out if treating high blood sugar in stroke patients with IV insulin is better than the current care for treating high blood sugar. IV insulin for blood sugar control is safe for acute stroke patients. The next step is to learn if this treatment can help you after a stroke.

Being in this study is completely **voluntary**. You do not have to take part if you don't want to. You can also leave the study at any time. If you leave the study before it is over, there will be no penalty to you. You will not lose any benefits.

NUMBER OF SUBJECTS AND LENGTH OF STUDY
Your participation in this study will be over after about 3 months.

About 1400 stroke patients are expected to take part in this study at about 65 medical facilities around the country. You will be one of about 50 subjects at SUNY Downstate Medical Center**.**

STUDY PROCEDURES
Enrollment
You will be given:

- a full medical and neurological exam
- a CT scan which takes a picture of your brain
- blood tests including a pregnancy test for women of child-bearing age
- electrocardiogram
- A NIHSS which is finding out of how badly the stroke has affected you

These are all part of regular care for stroke patients. We also keep the results for the study. The study will also keep information about your age, gender, and ethnic origin.

The study will randomly divide (like the flip of a coin) the patients into one of two groups. One group will get IV insulin and insulin or placebo (sterile salt water) shots under the skin to control high blood sugar. The other group will get insulin shots under the skin to control high blood sugar and will get sterile salt water by IV. Both groups will be getting IV solutions and shots under the skin so that you cannot tell which group you are in.

During the study, your chance of being placed in one group or the other will be based on how well the other study patients did. If one group is doing better than the other group then you will have a greater chance of being placed in the group which is doing better..

First 3 Days in Hospital
During the first 3 days, you will get medical and neurological exams at least once a day. This is regular care for stroke patients. An extra exam called the National Institutes of Health Stroke Scale will be done at the beginning of the study and each of the first 3 days of the study. It will also be done if you leave the hospital early and if your symptoms get worse during the first 3 days.

An IV catheter will be placed in your arm for the IV study solution. During the first 3 days in the hospital, you will get both an IV study solution (approximately 1 teaspoon per hour with insulin or sterile salt water) and up to four shots under the skin per day (about 1-4 drops of insulin or sterile salt water). You will have your blood sugar level checked by a finger stick hourly for the first four hours and then about every 1-3 hours. Your nurse will keep your blood sugar at the right levels by adjusting IV solutions or under the skin shots.

You should expect about 6 finger stick checks per day as part of your standard care. Extra finger stick checks will be done as part of the study. You should expect about 8-20 checks per day to safely give you insulin. You may need less or more finger sticks based on your blood sugar.

For the first 3 days during the study, you will not be given your blood sugar pills. You will also need to follow a special study diet during this time. At the end of the first 3 days of the study or before leaving the hospital, your doctor will give you a follow up plan..

Neurological examinations, including the NIH Stroke Scale, will take 5-15 minutes each. Each blood sugar check will take less than one minute, approximately 8-20 times per day for 3 days.

Study Activities – 6-week Interview (about 20 minutes)
You will get a telephone call from the study team about 6 weeks after your stroke. You will be asked about:

- any new symptoms or illnesses
- what medicines you are taking
- how your recovery is going
- how well you are able to do regular daily activities

If you cannot talk on the phone, we may ask a family member or caregiver questions about how you are doing.

Study Activities – 3-month Visit (about 2 hours)
About 3 months after your stroke you will see a doctor and/or nurse trained in caring for stroke patients. You will be given a neurological exam including the NIH Stroke Scale. You will also be asked a series of questions:

- that will measure how well you have recovered in your physical, thinking, and speaking abilities
- about how much help you need (if any) with usual daily activities
- about your general quality of life and recovery
- what medications you are currently taking
- whether you have had any serious illness or any hospitalizations since the 6-week telephone call

These questions can be answered by you or your family members if their help is needed.

RISKS AND DISCOMFORTS
The known or expected risks are:
Low blood sugar (*About 20% of subjects*) - 11/46 subjects in the THIS (Treatment of Hyperglycemia in Ischemic Stroke) study (blood sugar <60milligrams per deciliter); 9/74 subjects in the GRASP (Glucose Regulation in Acute StrokePatients) study (blood sugar <55milligrams per deciliter); GlucoStabilizer commercial data - % Patient Drips blood sugar < 70milligrams per deciliter = 20.9% and % Glucose values blood sugar < 70milligrams per deciliter = 2.01%

If your blood sugar is too low, you might feel:

- Confused
- Nervous
- Hungry
- Tingly or weak or
- Show signs like fast heart rate, sweatiness, sleepiness (*Less than 5% of subjects*) – 1/74 subjects in the GRASP study, 4/46 subjects in the THIS study

You may even have seizures or convulsions, or go into a diabetic coma if your blood sugar is extremely low (*Less than 1% of subjects*).

Your nurse will ask you about these symptoms and record them in case your blood sugar is low. You should tell your nurse about these feelings because they can mean your blood sugar may be low and needs to be checked. If your blood sugar stays very low for a long time, it can cause more stroke symptoms, seizures, or even death. However, this is extremely rare. If your blood sugar goes low but is brought back to normal quickly, injury is unlikely.
We will try to minimize these risks in these ways:

- Your blood sugar levels will be checked often to prevent low blood sugar
- If you have a finger stick blood sugar of less than 80, the study medicines will be temporarily stopped and you will be given glucose (sugar) right away so that your blood sugar will not go too low.
- Your blood sugar level will be checked every 15 minutes until your blood sugar level reaches at least 80.
- The study medicines will be restarted when it is safe to do so.

Problems associated with blood drawing, finger stick blood sugar checks, and IV placement:

- Pain from inserting a needle under the skin surface (common, >20%)
- Fainting at or about the time of blood drawing (infrequent, <20%)
- Bruising at the site (infrequent, <20%)
- Infection at the site (rare <3%).

You might need to have the first IV catheter replaced so the study solution can be given.

There is a slight risk that your personal information may be accidentally released for reasons other than the ones listed in this form. The researchers will try to minimize this risk by handling your information carefully, storing it securely, and sharing it only with authorized persons

As with any research study, there may be additional risks that are unknown or unexpected.

IF I TAKE PART IN THIS STUDY, CAN I ALSO PARTICIPATE IN OTHER STUDIES?
Being in more than one research study at the same time, or even at different times, may increase the risks to you. It may also affect the results of the studies. You cannot take part in more than one study without approval from the researchers involved in each study.

NEW INFORMATION
You will be quickly told if important new findings become known that may affect your willingness to continue in the study.

BENEFITS
We are not sure that your condition or stroke symptoms will get better because you are in this study. It may stay the same or worsen. You may not receive any personal benefits from being in this study. We hope the information from your being in the study will tell us the best way to treat stroke patients with high blood sugar. While you may or may not personally benefit from being in the study, your participation will provide a benefit to others with stroke and to society.

ALTERNATIVES TO STUDY PARTICIPATION
You do not have to be in this study or sign this consent. If you choose not to participate, you will receive the usual care for stroke patients, which includes fewer finger sticks daily and insulin shots to treat your blood sugar if it is high.

COSTS OF PARTICIPATION
You will not be required to pay any extra money because of this study. You will be responsible for the costs of the usual care for your stroke. The study will pay for the study treatment drugs that are not usual care and for the materials for the extra research finger stick blood sugar tests needed.

The normal costs of taking care of you for your stroke will have to be paid for by you or your insurance company. These costs are the same as you would be responsible for if you were not in this research study. The 3-month clinical follow up with your doctor for continuing stroke treatment and care which is not part of the scheduled research follow up activities will be not be paid for as part of the study.

REIMBURSEMENT FOR PARTICIPATION
You will receive reimbursement for transportation. A receipt is needed for all reimbursement. Reimbursement will be given at the study visit. You will be reimbursed by the coordinator.

COMPENSATION FOR INJURY
The researchers have worked to lower the risks of this study. You may still have problems or side effects, despite the best efforts of the researchers to avoid them. Please tell your regular doctors and/or the researchers about any injuries, side effects, or other problems you have during this study.

Compensation for an injury resulting from your participation in this research is not available from SUNY Downstate Medical Center**,** Biomedical Research Alliance of New York, or the sponsor for the study. You are not waiving any legal right to seek additional compensation through the courts by signing this form.

The Health and Hospitals Corporation (HHC) will treat subjects regardless of their inability to pay.

CONFIDENTIALITY
To the extent allowed by law, every effort will be made to keep your personal information private. Any time information about you is collected there is a potential risk for loss of confidentiality. To the extent allowed by law, every effort will be made to keep your information confidential; however, this cannot be guaranteed. Information about you collected for this research study will remain confidential, unless you give your permission to share it with others or if we are required by law to release it. Information from this study will be submitted to the study sponsor and to the U.S. Food and Drug Administration. It may be submitted to governmental agencies in other countries where the study drug may be considered for approval. Medical records, which identify you and the consent form signed by you, will be looked at by the sponsor or the sponsor's representatives. They might also be looked at by the FDA and other regulatory agencies, the Institutional Review Board, and the Biomedical Research Alliance of New York. While these parties are aware of the need to keep your information confidential, total confidentiality cannot be guaranteed. The results of this research project may be presented at meetings or in publications. You will not be identified in these presentations and/or publications.

A description of this clinical trial will be available on 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.

AUTHORIZATION TO USE AND DISCLOSE PERSONAL HEALTH INFORMATION
Federal regulations give you certain rights related to your health information. These include the right to know who will be able to get the information and why they may be able to get it. The study doctor must get your authorization (permission) to use or give out any health information that might identify you.

If you choose to be in this study, the study doctor will get personal information about you. This may include information that might identify you. The study doctor may also get information about your health, including:

- Past and present medical records
- Research records
- Records about phone calls made as part of this research
- Records about your study visits
- Information obtained during this research about laboratory test results
- Results from diagnostic and medical procedures including but not limited to X-rays, physical examinations and medical history
- Billing records

Information about your health may be used and given to others by the study doctor and staff. They might see the research information during and after the study.

Your information may be given to the sponsor of this research. “Sponsor” includes any persons or companies that are working for or with the sponsor, or are owned by the sponsor. Information about you and your health which might identify you may be given to:

- The U.S. Food and Drug Administration
- Department of Health and Human Services agencies
- Governmental agencies in other countries
- Biomedical Research Alliance of New York (BRANY)
- The SUNY Downstate Institutional Review Board
- Accrediting agencies
- Data safety monitoring boards
- Health insurers/payors
- HHC Corporate Research Staff Members

Your personal health information may be further shared by the groups above. If shared by them, the information will no longer be covered by the U.S. federal privacy laws. However, these groups are committed to keeping your personal health information confidential. If you give permission to give your identifiable health information to a person or business, the information may no longer be protected. There is a risk that your information will be released to others without your permission.

Information about you and your health that might identify you may be given to others to carry out the research study. The sponsor will analyze and evaluate the results of the study. In addition, people from the sponsor and its consultants will be visiting the research site. They will follow how the study is done, and they will be reviewing your information for this purpose. The information may be given to the FDA. It may also be given to governmental agencies in other countries. This is done so the sponsor can receive marketing approval for new products resulting from this research. The information may also be used to meet the reporting requirements of governmental agencies.

This authorization does not have an expiration date. If you do not withdraw this authorization in writing, it will remain in effect indefinitely.

By signing this consent form, you are giving permission to use and give out the health information listed above for the purposes described above. You do not have to sign this consent form. If you choose not to sign this consent form, you will not be able to be in this research study. Your decision not to sign this consent form will not have any effect on your medical care and you will not lose any benefits or legal rights to which you are entitled.

You have the right to review and copy your health information. However, if you decide to be in this study and sign this permission form, you may not be allowed to look at or copy your information until after the research is completed.

You may withdraw or take away your permission to use and disclose your health information at any time. You do this by sending written notice to the study doctor at the address on the front of this informed consent form. If you withdraw your permission, you will not be able to continue being in this study, but you will not have any penalty or loss of access to treatment or other benefits which are available to you if you didn't take part in this study. When you withdraw your permission, no new health information which might identify you will be gathered after that date. Information that has already been gathered will still be used and given to others.

Notice Concerning HIV-Related Information: The recipients of HIV-related information are prohibited from redisclosing it without your authorization unless permitted to do so under federal or state law. You also have a right to request a list of people who may receive or use your HIV-related information without authorization. If you experience discrimination because of the release or disclosure of HIV-related information, you may contact the New York State Division of Human Rights at 212-480-2493 or the New York City Commission on Human Rights at 212-306-7450. These agencies are responsible for protecting your rights.

VOLUNTARY PARTICIPATION / WITHDRAWAL

You are free to leave the study at any time. If you leave the study before it is finished, there will be no penalty to you. You will not lose any benefits to which you may otherwise be entitled. If you choose to tell the researchers why you are leaving the study, your reasons for leaving may be kept as part of the study record. If you decide to leave the study before it is finished, please tell one of the study doctors. You will still be treated for high blood sugar as part of your standard care.

Your participation in this study may be stopped without your consent at any time and for any reason by the study doctor, the sponsor, the FDA, and other regulatory authorities. There are many reasons why the researchers may need to end your being in the study. Some examples are:

- The researcher believes that it is not in your best interest to stay in the study
- You become ineligible to be in the study
- Your condition changes and you need treatment that is not allowed while you are in the study.
- You do not follow instructions from the researchers
- The study is suspended or canceled

If you leave the study early, you may be asked to return to the study doctor's office for a final study visit for your safety.

The Health and Hospitals Corporation (HHC) may stop this study or your participation in this study at any time.

PRIMARY CARE PHYSICIAN/SPECIALIST NOTIFICATION
Your primary care doctor and/or other doctors you are seeing may be notified of your being in this study so that they can provide you with appropriate, ongoing medical care.

QUESTIONS/COMPLAINTS/CONCERNS
If you have any questions about this research study or your participation in it, or if you want to voice a complaint or concern about this research, you may contact Drs. Jennifer Martindale or Ethan Brandler at 718-245-3141.

If you have any questions about your rights as a research subject or complaints regarding this research study, or you are unable to reach the research staff, you may contact a person independent of the research team at the Biomedical Research Alliance of New York Institutional Review Board at 516-318-6877. Questions, concerns or complaints about research can also be registered with the Biomedical Research Alliance of New York Institutional Review Board at www.branyirb.com/concerns-about-research.

Optional SHINE Sub-Study: I-SPOT
(Insight on Selected Procoagulation markers and Outcomes in stroke Trial)

In addition to the main research study, there may be an optional sub-study in which you may qualify to participate. Participating in this optional sub-study is important to the research; however you may participate in SHINE without agreeing to take part in this sub-study.

The purpose of the sub-study is to gather information about the effects of high blood sugar and insulin treatment on blood clotting. The blood samples collected will be used for this purpose only.

If you decide to participate, we will collect two blood samples, one before the SHINE study treatment is started, and the second will be collected about two days later. Each blood sample will be approximately one tablespoon of blood. With blood drawing, you may experience local pain and, rarely, infection or bruising.

Your blood samples will be labeled with your SHINE study identification number and the visit date. No personal information will be on the tubes used to store the blood samples. Your blood samples will be stored at Temple University for about 3 years after the completion of the SHINE study or up to 10 years. The results of these tests will not have an effect on your care, and neither you nor your doctor will receive the results.

You are free to choose not to participate. If you do participate, you are free to withdraw at any time up until the samples are de-identified, which means the samples are not linked to you. If you have any questions, or you would like to withdraw your blood sample, you should contact the principal investigator listed in this form. If you choose not to participate or if you withdraw, there will be no penalty to you. You will not lose any benefits to which you may otherwise be entitled. It will not affect your ability to participate in the SHINE trial.

Please initial whether you permit the collection of a repository blood sample as described above:

_____ YES, I give my permission for blood samples to be collected for the sub-study I-SPOT

_____ NO, I do not give my permission for blood samples to be collected the sub-study I-SPOT

STATEMENT OF CONSENT

I have read this consent form. I have been informed of the risks and benefits of being in the study. All of my questions have been answered to my satisfaction. The study doctor or study staff will answer any future questions I have. I will be given a copy of this signed consent form to keep.

By signing this consent form, I voluntarily agree to participate in this study.

_____
Subject's Name (Printed)

_____ _____
Subject's Signature Date Time

_____
Legally Authorized Representative's Name
(Printed, if applicable)

_____ _____ _____
Legally Authorized Representative's Signature Date Time
(if applicable)

_____
If Legally Authorized Representative, state relation to patient.

_____
Name of Person Obtaining Consent (Printed)

_____ _____ _____
Signature of Person Obtaining Consent Date Time

_____
Witness's Name (Printed, if applicable)

_____ _____ _____
Witness's Signature Date Time
(if applicable)