St. Michael's
Inspired Care. Inspiring Science.

CONSENT TO PARTICIPATE IN A CLINICAL RESEARCH STUDY

Endothelial Function In Patients with Hepatopulmonary Syndrome

Investigators:

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Division of Cardiology
Telephone: (416) 864 -5642. Availability: Monday to Friday, 9 am to 4 pm

Introduction:

Before you agree to participate in this research study, it is important that you read and understand the following explanation of the study. It describes the purpose, procedures, benefits, risks, discomforts, and precautions associated with the study. It describes your rights as a participant, including the right to withdraw from the study at any time. It is also important that refusal to participate will not influence the standard treatment you receive.

This consent may contain words that you do not understand. Please ask the study doctor or staff to explain any words or information that you do not understand.

Background:

You have been invited to participate in a clinical research study to evaluate the effects of Hepatopulmonary Syndrome (HPS) on the function of endothelial cells (EC).

The hepatopulmonary syndrome (HPS) is a lung complication disease which is a of chronic liver disease. People with HPS develop enlargement of the blood vessels in the lungs, resulting in low oxygen levels and shortness of breath.

Endothelial cells (ECs) are cells that line the inside of all blood vessels and play an important role in maintaining the proper function of the blood vessel. They prevent the formation of clots, manage the contraction and relaxation of the vessel wall and have an important role in the formation of new blood vessels. Endothelial progenitor cells (EPCs) are cells which circulate in the blood and have the ability to become ECs and replace

damaged ECs. Since they act like ECs, they can be used as a substitute for the difficult to acquire ECs.

We believe that patients with HPS have impaired function in their EPCs, and we want to study these cells to see if they behave differently under various conditions as compared to EPCs from patients with no history of HPS.

Purpose:

The purpose of this study is to determine if normal endothelial cell (EC) function is impaired in patients with HPS. We will be isolating and measuring EPCs from the blood of controls and of people with HPS. The EPCs will be grown in the lab and we will then assess their behaviour under various conditions.

Procedures:

A blood sample (approximately 6 and a half tablespoons, or 100 ml.) will be taken from your arm. If you are an HPS patient and you receive a liver transplant, we will ask you to consider giving another blood sample post transplant. Your EPCs will then be isolated and their function will be assessed in the laboratory.

If you are a patient in the HPS clinic and have agreed to be part of the HPS Database, then your clinical information is already found in the database, and we will use this information to help us to understand how your EPC function may be related to your medical history, background, and other factors.

If you are a control subject, then we will ask you a set of basic questions about your medical background and demographics, to be able to understand how your EPC function may be related to your medical history, background, and other factors.

Future Use of Research Data or Samples

For future use, we would like to store a small portion of the blood sample that we take from your arm (1.5 tablespoons or 22 ml). This small portion will be stored anonymously in a specialized medical freezer at St. Michael's Hospital, for later testing of some factors relevant to HPS, that can not be tested for at this time (such as levels of specific hormones or proteins).

These tests are either not available at this time, or not within the current study budget.

No genetic testing will be carried out on this stored sample.

These samples will be kept for 5 years and then destroyed.

In later testing if any problems with your blood sample that may affect your safety or care are detected, you will be notified by the study physicians.

Participation in this portion of the study is optional and you may decline to have your blood sample stored for future tests.

If you consent to have your blood sample stored for future testing but in the future you decide to revoke your consent to this option, you may simply call Dr. Samir Gupta at (416) 864-6026 and ask that your blood sample be destroyed.

Risks:
The risks of giving a blood sample include: light-headedness, bruising, minor bleeding where the needle is inserted into the arm, pain, and a very low chance of infection. About 6.5 tablespoons, or 100 ml. of blood will be taken as a sample. It is important that you report any and all symptoms to your doctor or study personnel.

The only inconvenience is the time spent for giving the blood sample (5-10 minutes). For control subjects, there is an added inconvenience of answering some basic background questions (5-10 minutes).

Benefits:
There will be no direct benefit to you; however, the information that will be collected may help in developing better methods of treating patients with HPS.

Potential Costs/Reimbursement :
There will be no additional costs incurred by you for participation. There will be no financial compensation provided for your enrolment in this study.

Compensation for Injury:
If you suffer a physical injury from the procedure(s) or participating in this study, medical care will be provided to you in the same manner as you would ordinarily obtain any other medical treatment. In no way does signing this form waive your legal rights nor release the study doctor(s) or involved institutions from their legal and professional responsibilities

Alternative Treatment:
If you decide not to participate in this study, you or your family's standard medical care will not be affected in any way.

Confidentiality and Privacy:
All St. Michael's Hospital (SMH) study staff (study investigators, coordinators, nurses and delegates) are committed to respecting your privacy. No other persons will have access to your personal health information or identifying information without your consent, unless required by law. The study staff will make every effort to keep your personal health information private and confidential in accordance with all applicable laws, regulations, guidelines and privacy legislations, including the Personal Health Information Protection Act (PHIPA) of Ontario.

Any personal health information or personal information collected about you will be "de-identified" by replacing your personal identifying information with a "study number". The SMH study staff are in control of the study code key, which is needed to connect your

personal health information/personal information to you. The link between the study number and your personal identity will be safeguarded by the SMH study staff. Our guidelines include the following:

- All information that identifies you, both paper copy and electronic information, will be kept confidential and stored and locked in a secure place that only the study staff will be able to access.
- Electronic files will be stored securely on hospital or institutional networks or securely on any portable electronic devices.
- No information identifying you will be allowed off site in any form. Examples include your hospital or clinic charts, copies of any part of your charts, or notes made from your charts.

It is important to understand that despite these protections being in place, there continues to be the risk of unintentional release of information. The SMH study staff will protect your records and keep all the information in your study file confidential to the greatest extent possible. The chance that this information will be accidentally released is small.

Although all of your study data will be kept confidential, your medical records or study records may be accessed by the study staff or authorized representatives of the St. Michael's Hospital Research Ethics Board. Such access will be used only for the purpose of verifying the authenticity and accuracy of the information collected for the study, without violating your confidentiality to the extent permitted by applicable laws and regulations.

Federal and Provincial Data Protection regulations, including the Personal Information Protection and Electronic Documents Act (PIPEDA 2000) and the Personal Health Information Protection Act (PHIPA 2004) of Ontario, protect your personal information. They also give you the right to control the use of your personal information (including personal health information) and require your written permission for this personal information to be collected, used, or disclosed for the purposes of this study, as described in this consent form. You have the right to review and copy your personal information collected in this study. However, if you decide to be in this study or choose to withdraw from it, your right to look at or copy your personal information related to this study will be delayed until after the research is completed. The study investigators will keep your study records and blood samples securely stored for 5 years.

New Findings:

You will be told of any significant new findings obtained from this study that may impact you or your family.

Participation and Withdrawal:

Participation in any research study is voluntary. If you choose not to participate, you and your family will continue to have access to customary care at St. Michael's Hospital. If you decide to participate in this study you can change your mind without giving a

reason, and you may withdraw from the study at any time without any effect on the care you and your family will receive at St. Michael's Hospital.

Research Ethics Board Contact:

If you have any questions regarding your rights as a research subject, please contact Dr. Robert Hyland, Chair Research Ethics Board at 416 864 6060 ext 2557.

Endothelial Function In Patients With Hepatopulmonary Syndrome

Consent to Participate in Study with Consent for Blood Storage:

By signing this consent form, I acknowledge that the research study has been explained to me. I have been given an opportunity to ask questions and any questions I have asked have been answered to my satisfaction. I have been informed of the alternatives to participation in this study, including the right not to participate and the right to withdraw without compromising the quality of medical care at St. Michael's Hospital for myself and for other members of my family. As well, the potential risks, harms, and discomforts have been explained to me as well as the possible benefits to participating in the study.

I understand that I have not waived my legal rights nor released the investigators, sponsors, or involved institutions from their legal and professional duties. I understand that I may now, or in the future, ask any questions I have about the study or research procedures. I have been assured that records relating to me and my care will be kept confidential and that no information will be released that would disclose personal identity without my permission unless required by law. I have been given sufficient time to read and understand the above information. By signing this consent, I agree to participate. I will be given a signed copy of this consent form.

_____

Participant's Name Participant's Signature Date (dd/mmm/yyyy)

I confirm that I have explained the nature and purpose of the study to the participant named above. I have answered all questions.

_____ _____

Signature of Study Personnel Obtaining Consent Date (dd/mmm/yyyy)

_____

Name of Person Obtaining Consent (Please print)

ASSISTANCE DECLARATION □ **_____** *Initials (check and initial here if not applicable)*

The participant was assisted during the consent process as follows (check, as applicable):

□ *I have been requested to interpret the consent discussion for the potential research participant _____. I am competent in the English language and in the language of choice of the potential participant _____. I am not involved in the research study. I agree to keep confidential all personal information of the potential participant. I have interpreted the consent discussion. The potential participant has advised me in his/her own language that he/she has been informed about the research study, the nature and extent of his/her participation, including the risks involved. The potential participant freely gives his/her consent to participate in this study.*

_____ _____ _____

Name of Interpreter (printed) *Signature of Interpreter* *Date*

Contact Information: _____

Endothelial Function In Patients With Hepatopulmonary Syndrome

Consent to Participate in Study – No Consent for Blood Storage :

By signing this consent form, I acknowledge that the research study has been explained to me. I have been given an opportunity to ask questions and any questions I have asked have been answered to my satisfaction. I have been informed of the alternatives to participation in this study, including the right not to participate and the right to withdraw without compromising the quality of medical care at St. Michael's Hospital for myself and for other members of my family. As well, the potential risks, harms, and discomforts have been explained to me as well as the possible benefits to participating in the study.

I understand that I have not waived my legal rights nor released the investigators, sponsors, or involved institutions from their legal and professional duties. I understand that I may now, or in the future, ask any questions I have about the study or research procedures. I have been assured that records relating to me and my care will be kept confidential and that no information will be released that would disclose personal identity without my permission unless required by law. I have been given sufficient time to read and understand the above information. By signing this consent, I agree to participate. I will be given a signed copy of this consent form.

_____

Participant's Name Participant's Signature Date (dd/mmm/yyyy)

I confirm that I have explained the nature and purpose of the study to the participant named above. I have answered all questions.

_____ _____

Signature of Study Personnel Obtaining Consent Date (dd/mmm/yyyy)

_____

Name of Person Obtaining Consent (Please print)

ASSISTANCE DECLARATION □ **_____** *Initials (check and initial here if not applicable)*

The participant was assisted during the consent process as follows (check, as applicable):

□ *I have been requested to interpret the consent discussion for the potential research participant _____. I am competent in the English language and in the language of choice of the potential participant _____ I am not involved in the research study. I agree to keep confidential all personal information of the potential participant. I have interpreted the consent discussion. The potential participant has advised me in his/her own language that he/she has been informed about the research study, the nature and extent of his/her participation, including the risks involved. The potential participant freely gives his/her consent to participate in this study.*

_____ _____ _____

Name of Interpreter (printed) *Signature of Interpreter* *Date*

Contact Information: _____