**Singapore Sports Institute**



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**A Prospective Sports Cardiology Registry in Singapore and Southeast Asia**

**Participant Information Sheet**

***Purpose***

You are invited to participate in a research study. This is a collaboration between the National University Heart Centre Singapore and the Singapore Sports Institute.

It is important to us that you first take time to read through and understand the information provided in this sheet. Nevertheless, before you take part in this research study, the study will be explained to you and you will be given the chance to ask questions. After you are properly satisfied that you understand this study, and that you wish to take part in the study, you must sign this informed consent form. You will be given a copy of this consent form to take home with you.

The purpose of this study is to establish a registry of electrocardiogram and echocardiogram for athletes and physically active individuals in Singapore and Southeast Asia. This allows the characterization of the athlete’s heart by taking into consideration unique contributing factors of ethnicity, gender, sporting discipline and age.

The total number of subjects to be recruited is 1000 from the Singapore Sports Institute and 200 from National University Hospital. Recruitment will span 3 years.

***Procedures***

This study will involve at least 1 visit.

Subsequent follow up visits are optional and applicable to selected individuals.

Procedures done at each visit within SSI include:

- a questionnaire to determine demographic information, baseline medical history and training history

- height, weight, blood pressure and resting heart rate

- resting 12-lead electrocardiogram

- resting echocardiogram

Data collected from national level athletes will be compared with physically active individuals who are non-national level athletes.

***Responsibilities***

If you agree to participate in this study, you should follow the advice given to you by the study team. You should be prepared to undergo all the procedures that are outlined above.

***Risks***

This study involves non-invasive electrocardiogram and echocardiogram assessments. There are minimal risks to these tests. Adhesive stickers used in both tests may rarely cause minor skin irritation. During echocardiography, light pressure will be applied on the chest wall using an ultrasound probe, which may cause some discomfort. You may also be required to hold your breath intermittently during the test. All of the above are temporary and short-lived, as an electrocardiogram takes around 5 minutes and echocardiogram takes around 30 min.

Should the investigations reveal potentially life-threatening abnormalities, there may be a possibility of disqualification from competitive sport.

***Benefits***

Participants will have knowledge of their cardiac function based on electrocardiogram and echocardiogram findings.

All significant abnormalities detected that may impact participation in competitive sport will be disclosed to the participant and his/her coach/sports physiologist, allowing for timely assessment and management.

Additionally, participation in this study will add to medical information that will have long term benefits of characterizing the Singaporean/Southeast Asian athlete’s heart, establishing of normal ranges for electrocardiographic and echocardiographic parameters, as well as potentially contribute to development of dedicated cardiovascular screening criteria for athletes and active individuals.

***Incidental findings***

If you are found to have an inherited risk for a disease/condition known at the time of testing to be likely to cause premature death if untreated, we will notify you and your coach / sports physiologist directly responsible for your sporting performance. This will be by way of certified mail to contact Dr Yeo Tee Joo at the National University Heart Centre Singapore (NUHCS). NUHCS staff will not release these specific research findings over telephone or by mail. Please provide us with any change in your address, since such notification will be sent to the last address you provided to study personnel.

Your test results, medical, training and family history data may be shared with other investigators or other research institutions for research purposes. Your identity will remain confidential and will not be available under any circumstances to these collaborators. The researchers directly involved with this study will review the potential scientific value of research proposed by other investigators before agreeing to the use of the resources of the project. Any proposed research with your information must also be approved by the NHG Domain Specific Review Board or a similar institutional review board. Researchers who ask to study investigation results, medical or training history will not be given your name or other information that might reveal your identity, such as your initials or date of birth. All data shared with other investigators will be given a unique code number. The key to the code will be kept in a locked file available only to Dr Yeo and his research staff. The NUHCS investigators need to maintain a link between the coded identification number by which data are identified to other investigators and the confidential information is kept by the investigators at NUHCS. This will allow the investigators to study test results provided by the collaborators using your data to better understand the athlete’s heart and other related conditions.

***Confidentiality***

All data collected will remain completely confidential. Data may be used in scientific reports in a manner that does not reveal your identity, unless your consent has been obtained in writing.

***Rights***

Participation is purely voluntary and you are free to withdraw from the study at any time, without penalty, prejudice, negative consequences, repercussion, or disadvantage and no reason is required for your withdrawal. Your decision to withdraw from this study will be kept confidential. Upon withdrawal, all data obtained from you and associated with you will be erased and destroyed.