



## WORLD TRANSPLANT GAMES ATHLETES PARTICIPATING IN THE 2011 GAMES AT GOTHENBURG

**Re: Research project during the Games**

**October 2010**

Dear transplant recipient/athlete

Transplantation saves lives, enhances the quality of lives and also provides opportunity for a long life. It is necessary for clinicians to evaluate the progress of transplant recipients to try to improve the lifestyles of recipients with the intention of preventing premature organ loss, loss of life or loss of quality of life. **It is with this background that the executive and council of the World Transplant Games Federation have proposed that clinical research should be undertaken during the Transplant Games. It is hoped through this research that all transplant recipients may be guided to improve the quality of life through sport.**

This letter is forwarded to you to provide you with an understanding of the protocols of the proposed clinical research. The letter will also provide you with information about how the research may influence the volunteer athletes during the Games. This letter will also invite you to participate in the research studies. If you are provisionally willing to participate in the studies outlined below we ask you to confirm by signing the document of confirmation of willingness to participate in these research studies.

It is important to advise you that your willingness to participate in a study may not mean that you will be chosen to be part of the study as there may be aspects of your life and medical profile which may require the researchers to leave you out of the study group for statistical purposes only.

All studies will be approved by a Swedish regional ethics committee. All subjects will be given detailed information on the studies and asked to sign an informed consent. We intend to publish the results on group level only. No single person could be identified/ all data will be coded.

Some athletes participating in strenuous activities, such as road race, badminton or squash singles, will be studied more closely in the resting state, during and after the event. Participants in bowling will also be asked to participate as a control group. All subjects will undergo tests, including blood tests (before and after the exercise), dual X-ray absorptiometry and high resolution peripheral computerized tomography, non invasive

techniques measuring body composition and bone microarchitecture, respectively. During the event the subjects will be monitored with a pulse monitor.

The first research protocol is an investigation of the influence of physical activity on bone health. The proposal to be evaluated is that the greater the physical activity of the transplant athlete the healthier the bone structure will be. This study will entail 50 selected transplant games athletes visiting a research centre in Gothenburg to undergo a sophisticated low radiation computed tomography (CT) scan of the tibia, the main bone of the lower leg. Using dual x-ray absorptiometry (DXA) body composition, defining lean and fat mass, will be determined. This will involve a 20 minute study and it will be necessary for the athlete to be transported from the Games venue to the research facility. A blood sample will be obtained to correlate the bone features with the metabolic status of the athlete. These studies will be evaluated over many months. The athletes will be informed of any serious abnormality (which is unlikely) and will be informed of the results of the analysis.

The second study will be an investigation of the influence of physical activity on the health of circulating endothelial cells of the athletes. The proposal is that with increasing physical activity the health of the circulating endothelial cells increases. In this study certain athletes will be required to undergo a blood sample prior to competing and a blood sample after competing. In this study the athletes will not be required to visit the research centre. Once again the athletes participating in the study will be advised of any serious abnormality detected by the study and they will also be informed of the results of the research.

In addition some national teams will be invited to answer a questionnaire asking for their attitudes to sports and about their athletic experiences.

The World Transplant Games Executive and Councillors thank you in anticipation for your willingness to partake in this research.

Should any of the athletes have concerns, suggestions or extra needs during these research studies please do not hesitate to contact the local organising committee in Gothenburg. The organisers and researchers thank you in anticipation.

Yours sincerely



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