

PROJECT REVIEW

“Using DNA Typing and Erythrocyte Microparticle analysis to detect blood doping – a transfusion study”

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In this study a trial will be performed in which 6 subjects receive a homologous and another 6 an autologous blood transfusion. Blood samples will be taken before and at several time points after transfusion. Samples will be analysed for Red Blood Cell Microparticles (RBC-MPs) using flow-cytometry to confirm results from a previously conducted blood storage study in which we found an approximately 100fold increase of RBC-MPs in stored blood bags.

As a second objective DNA-Genotyping will be performed from the blood samples of the homologous transfusion to investigate efficacy of Genotyping compared to flow-cytometry.

The major goal of this study is to get information about the clearance rates of RBC-MPs and donor DNA after transfusion.