



International Society on Thrombosis and Haemostasis

Scientific and Standardization Committee (SSC)

July 2010

Standardization of Pre-analytical Variables in Plasma Microparticle Determination.

Dear Colleagues,

In the past two years, the Scientific Subcommittees on Vascular Biology, DIC and Haemostasis & Malignancy have set up a network aimed at standardizing the enumeration of cellular microparticles (MPs). A first collaborative workshop was organized to define the inter-laboratory reproducibility of platelet-derived MP counts using flow cytometry. The conclusions of this workshop, presented in ISTH Boston in 2009, have been submitted for publication to the Journal of Thrombosis and Haemostasis. We want to thank all the people who kindly helped to set up this workshop and those who actively participated.

During our last meetings, standardization of the pre-analytical step was identified as a priority and a current limitation for future studies to evaluate the role of circulating microparticles (MPs) in clinical practice. Therefore, the Scientific Subcommittee on Vascular Biology proposes a new collaborative workshop to evaluate the impact of pre-analytical variables on MP determination.

Microparticles (MPs) are sub-micron sized cell membrane/cytoplasmic fragments that are released by activated or apoptotic cells. MPs from numerous cellular sources have been described in human plasma. They have received increasing interest for their role as biomarkers and biovectors in blood coagulation, inflammation and cancer. Numerous clinical studies have evaluated their usefulness to identify patients at risk for vascular disorders and to monitor response to treatment. However, a wide range of pre-analytical variables (blood handling and centrifugation conditions, use of frozen vs. fresh samples, etc) are a major source of variability and potential artifacts in MP analysis. Several teams have evaluated the impact of these different parameters to propose a pre-analytical protocol for MP analysis.

However, before setting recommendations, this protocol needs to be evaluated on a larger scale. To that aim, the following collaborative workshop is proposed: participant laboratories will prepare Platelet Free Plasma (PFP) from well-defined healthy donors (n=15 per laboratory) using pre-determined conditions and their own pre-analytical protocol, and the core laboratory will analyse these PFP, using flow cytometry and functional assays to enumerate and characterize the MPs.

If you would like to participate, kindly complete the form-of-intent confirming your interest. Please return the completed form to: romaric.lacroix@univmed.fr Registration will remain open until October 15th 2010 and the number of participating laboratories will be limited to 30.

We are looking forward to receiving your form-of-intent; thank you in advance for your input
With best wishes

Françoise Dignat-George & Nigel Key

FORM OF INTENT

First name	
Last name	
Institution	
Full address	
Phone	
Fax	
E-mail	
Are you interested in participating to a workshop on microparticles pre-analytics ?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Is blood collection from healthy donors allowed by your institution?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Is blood collection from healthy donors possible directly in your laboratory?	YES <input type="checkbox"/> NO <input type="checkbox"/> If NO, how far is the blood collection unit located from your lab?