The results of fibrinolytic surveys

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The ECAT frequently evaluates its quality control panel and in collaboration with the participants investigates if additional test have to be included into the external quality assessment programme in the field of haemostasis and thrombosis. In 2009 a pilot-survey for fibrinolytic parameters was organized, including PAI-1 antigen and activity, t-PA antigen, alpha-2-antiplasmin (Plasmin Inhibitor) and plasminogen. Both for PAI-1 and t-PA a broad range of between laboratory CV was observed which showed the need for standardization for PAI-1 and t-PA methods and improvement of the between laboratory variation. This resulted in inclusion of a fibrinolytic module in the external quality assessment programme of the ECAT foundation in 2010. This new fibrinolytic module consists of plasminogen activity and antigen, Plasmin Inhibitor activity, PAI-1 activity and antigen and t-PA antigen. A summary of the results of the first two surveys in 2010 will be presented. In each survey 2 different samples were used. It will be shown that the total group CV of plasminogen activity and Plasmin Inhibitor activity had a range of 8,0 – 12,9% in survey 2010.1 and 9.2% - 13,7% in survey 2010.2. On the other hand, the total group CV of PAI-1 activity and antigen, and t-PA antigen had a range of 37,3 – 111% and 47,4 – 92,7%, respectively.
This shows that the results of different methods for plasmin Inhibitor activity and plasminogen activity, both using amidolytic methods are fairly good comparable. The much higher CV for PAI-1 activity and antigen, and t-PA antigen shows the lack of standardisation in these measurements, mainly due to the heterogeneity of the antibodies used and their specifity.