

THE RESULTS OF THE ECAT PILOT STUDY ON FACTOR XIII TESTING

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The ECAT frequently evaluates its quality control panel and probes the participants needs for additional test to be included into the ECAT external quality assessment programme, by performing pilot studies. At the moment interlaboratory comparison of Factor XIII testing is hampered by the lack of an international standard of factor XIII. For this reason ECAT-participants were invited to participate in the pilot study on Factor XIII testing. In total 95 participants signed up for this pilot, what was more than enough to perform the pilot. Four samples were sent out and 79 participants (83%) measured and returned their results.

The Factor XIII activity-assay was performed by 69 participants in which the chromogenic and the clot lysis assay was the most frequently used type of assay. The clot lysis assay (28 participants) generates a kwantitative result rather than a percentage of a normal poolplasma. All, except one participant, reported the presence of factor XIII activity in all four samples. The Factor XIII activity, determined with other functional assays (41 participants), resulted in interlaboratory CV's between 10 and 16% for abnormal and borderline samples, and a CV of 25% for the normal sample, respectively. The Factor XIII antigen-assay was performed by 15 participants in which a latex based immunoturbidimetric assay was the most frequently used type of assay. For the Factor XIII antigen interlaboratory CV's were found between 15 and 18% for abnormal and borderline samples, and a CV of 17% for the normal sample, respectively.

In conclusion, with the number of participants in this pilot a fairly good interlaboratory comparison can be made, which can contribute in time in achieving a decrease in the interlaboratory CV. Therefore, the ECAT decided to include the Factor XIII testing in their external quality assessment programme for 2009.