

THE RESULTS OF THE ECAT HIT SURVEYS

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In autumn 2007 the ECAT Foundation organised for the first time a survey on the laboratory testing for heparin-induced thrombocytopenia (HIT). The meaning of this survey was to make an inventory on the current practice of HIT testing as well as to gain insight into the performance of current laboratory methods. To our knowledge this was the first large-scale international survey on quality control for HIT testing. A HIT-positive and HIT-negative sample were distributed to the participants. Eighty-nine laboratories returned results. The vast majority of laboratories (75%) had only used an immunological test while a minority (2%) had only used a functional test. Of the immunological tests an ELISA-based assay is most frequently used (~60%). The positive sample was correctly classified by 90% of the users of an immunological test. Five per cent had classified the sample negative. The other participants had classified the sample as borderline. With the functional test more problems were observed. This is most likely caused by the use of lyophilised sample material in the survey. The HIT-negative sample was correctly classified by more than 95% of the participants.

The results will be discussed in more detail.

In 2008 the ECAT Foundation continued their EQA programme for HIT testing. Today about 135 participants have joined this programme.

In this survey again a HIT-positive and HIT-negative sample were distributed.

The positive sample was correctly classified by 94% of the users of an immunological assay. About three per cent classified the sample as negative and another 3% classified the sample as borderline. Again problems with the functional tests were observed.

The negative sample was correctly classified by almost all participants.

In this survey also the measured optical density (OD) was evaluated in relation to the given cut-off level. A considerable variation both between and within methods could be observed for the ratio of the measured OD and the cut-off level.

It can be concluded that QC surveys for HIT testing may play an important role in the assessment of the current status of performance of the laboratory testing for HIT. It may assist in the further improvement of the laboratory diagnosis of HIT.