patients is restricted. This study was designed to determine the in vitro sensitivity to LMWH of different reagents by sonoclot analyser, and to determine whether the ACT can be used to monitor LMWH.

**Methods** This study was performed in vitro. ACT was measured with different reagents (glass beads, celite, and kaolin) on volunteer (n=30) blood samples spiked with increasing concentrations of LMWH (dalteparin, 0.2–1.8 IU/ml). Linear regression analysis was performed to establish a regression equation from different concentration of dalteparin and corresponding ACT values.

**Results** Analysis of dose-response curves obtained in vitro, an excellent linear relationship was observed between the ACT and dalteparin concentrations for all three reagents (p<0.01). Differences in slope of the regression curve of ACT were observed with all the reagents tested (glass beads 249.7 s/IU, celite 77.7 s/IU, and kaolin 59.5 s/IU, p<0.01). Reagents vary widely in their in vitro sensitivity to dalteparin. In the concentration range of 0.2–1.8 IU/ml, the gaolin reagent was too insensitive to dalteparin, and glass beads was the most suitable reagent for monitoring the anticoagulant effect of dalteparin.

**Conclusions** Using sonoclot analyser, there was an excellent linear relationship between the ACT and dalteparin concentrations for all the three reagents (glass beads, celite, and kaolin) in vitro. Glass beads may be a suitable reagent of ACT test for monitoring the anticoagulant effect of LMWH.