

## Heparin Dose-Response Curve Program

*Machaon Diagnostics is now offering heparin-response curve correlation studies for determination of aPTT therapeutic ranges.*

Unfractionated heparin (UFH) is commonly monitored in clinical settings by activated partial thromboplastin time (aPTT) measurement. Significant variation can occur between measured aPTT and perceived heparin level. These variations have been recorded between different reagent manufacturers, between different manufactured lots and between different instruments. In 1993 Brill-Edwards described a method for measuring the in vitro heparin-responsiveness associated with aPTT reagents.<sup>1</sup> Currently, several laboratory-governing agencies recommend that heparin response curves be established for aPTT reagent each time there is a change in lot, reagent source or instrumentation.<sup>2</sup>

### Indication:

New aPTT reagent  
New lot number of aPTT reagent  
New aPTT instrument is introduced

### Method:

Anti-factor Xa [Chromogenic]  
We recommend sending 50 - 150 citrated plasma samples containing various amounts of UFH. Samples must be sent with documented aPTT result measured on the instrument and using the specific aPTT reagent designated for the study.

### Testing and Interpretation:

Machaon Diagnostics will assay your samples and plot the measured UFH level against the provided aPTT value, consistent with the Brill-Edwards protocol. We will determine your facility's therapeutic aPTT range based on the reported UFH level of 0.3-0.7aXaU/mL, unless another target range is provided. A report of the charted results will be faxed and/or mailed to the submitting facility within 48 hours.

**Cost: \$49.50 per sample**

### References:

1. Brill-Edwards, P et al. Establishing therapeutic range for heparin therapy. *Ann Intern Med* 1993;199:104-109.
2. Hematology - Coagulation Checklist. CAP Guidelines. 2004 (Revision: 09/30/2004).

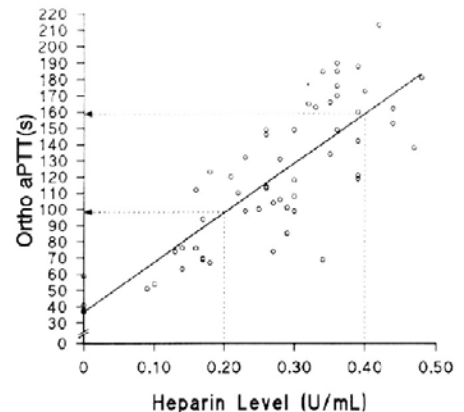
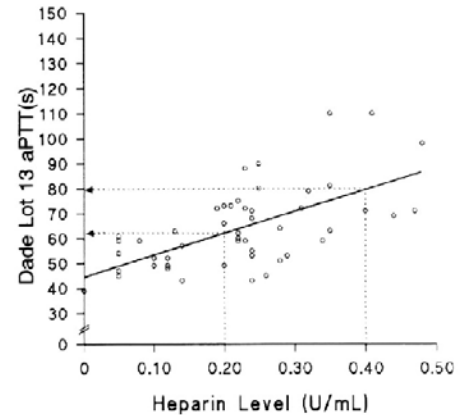


Figure: Heparin dose responsiveness curves for educational purposes only. (Brill-Edwards, 1993)