SUBJECT: PTT Mixing Study

In cases of prolonged PTT’s, factor deficiencies can be differentiated from thrombin inhibitors (circulating clotting inhibitors) by mixing patient plasma with normal plasma in a 1:2 ratio and re-running the mixed specimen.

Interpretation of Results:
- No correction after addition of normal plasma. This suggests an immediately acting circulating inhibitor such as heparin or lupus-like anticoagulant.
- Initial correction after addition of normal plasma, but no correction after incubation. This suggests a time dependant inhibitor such as anti VIII-C.
- Initial correction after addition of normal plasma and continuing after incubation with normal plasma. This suggests a factor deficiency.

Interferences: Heparin and Coumadin. Patient should not be on anticoagulant therapy. Specimen should not be collected from a port or CVP line that has be flushed with heparin unless properly cleared. See 1.2 Ordering and Handling of Laboratory Tests.

Specimen:

5 Blue top tubes on ice. Blood must be collected in a 9:1 ratio with sodium citrate (blue top tube). PT and APTT must also be ordered along with the Mixing Study. Specimens should be sent to the Lab within 2 hours. Analysis is performed at the Core Laboratory at Sinai.

Patients with hematocrits greater than 52% must have blood drawn with a different amount of citrate. Please notify the Lab in this case so that a special tube can be provided.

Frequency of Analysis: Monday through Fridays, 8 AM to 3 PM.