AT THE FOREFRONT
UChicago Medicine

TO: Medical Staff, House Staff, Patient Care Centers, and Outpatient Clinics

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DATE: September 14, 2020

RE: Modification to aPTT mixing study

The aPTT mixing study is a screening test to determine if the cause of a prolonged aPTT is a factor deficiency state or due to the presence of an inhibitory substance.

UCM Coagulation Laboratory has previously performed only an immediate mix. Adding an incubated mix (2hr 37C incubation) may make the aPTT mixing study more sensitive to FVIII specific inhibitors.

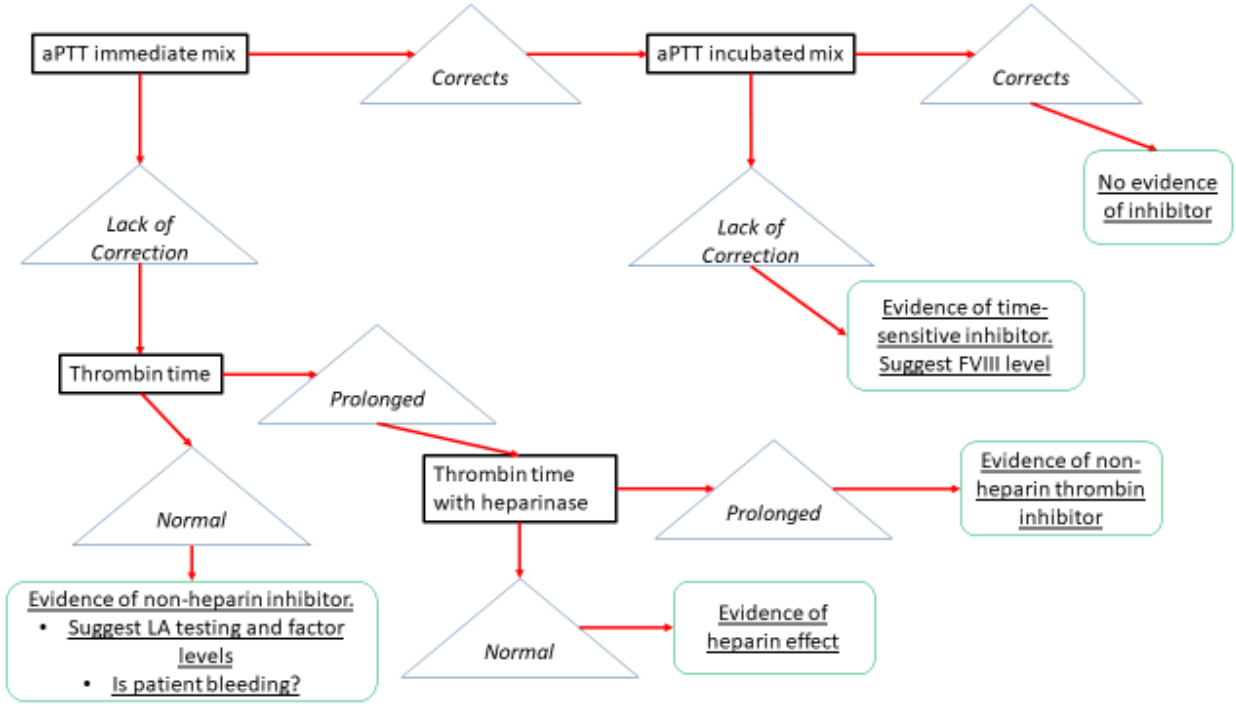
The immediate mix will continue to be reported as a clotting time (in seconds), with no change in reference range. For the incubated mix, we will report the results using the index of circulating anticoagulant (ICA):

ICA = [(b − c)/a] × 100, where a, b and c are the clotting times of the patient plasma, the 1:1 mix, and the normal plasma, respectively.

Normal range for the incubated mixing study will be <15.0%.

The UCM Coagulation Laboratory on-service pathologist will review aPTT mixing studies and provide an interpretive report, as indicated.

Process diagram for interpretation of aPTT mixing study results



For questions, please contact Krzysztof Mikrut, Laboratory Manager, at 773-702-1315, or Geoffrey Wool, MD PhD, Medical Director, at 773-926-1455.

References:

- Favaloro. *Am J Hematol*. 2020;95:117–128.
- Benzon. *Anesth Analg.* 2019;128:1089–96
- Chang. *Am J Clin Pathol.* 2002;117:62-73.
- CLSI Document H47-A2