



Anti-Factor Xa Assay for Monitoring Unfractionated Heparin

Effective March 12, 2019, Laboratory Alliance of Central New York will offer the anti-factor Xa assay for monitoring unfractionated heparin. Heparin is used as an anticoagulant to prevent and treat blood clots and exists in two forms – unfractionated heparin (UF) and low molecular weight (LMW) heparin.

Clinical Significance

The efficacy of heparin is dependent on dosing and achievement of the therapeutic range. Subtherapeutic levels increase the risk of clot formation, while supratherapeutic levels can cause bleeding.¹

Use of the anti-factor Xa assay to monitor unfractionated heparin has some benefits over the activated partial thromboplastin time (PTT) assay. The anti-factor Xa assay provides a direct measure of heparin activity and has an established therapeutic range of 0.3 – 0.7 IU/mL rather than a laboratory-specific range. The anti-Xa test is less affected by biological, pre-analytical, and analytical variables. Patients should reach the therapeutic range sooner with fewer test orders.

The test is useful for patients with a prolonged baseline PTT, such as patients with lupus anticoagulant or a factor deficiency, who need to be monitored for unfractionated heparin therapy. When used to monitor continuous intravenous administration of unfractionated heparin, anti-factor Xa can be measured at any time (i.e., as a random level).

Test Name:	Unfractionated Heparin
Test Code:	HEPUF
Method:	Chromogenic Assay
Specimen Requirements:	One adequately filled 3.0 mL light blue (sodium citrate) top tube. For specimens that cannot be shipped to the laboratory to arrive within 4 hours of collection, see Collection and Processing of Coagulation Specimens information. This can be found in the Directory of Services in the Specimen Collection Documents section or use this link: http://laboratoryalliance.com/healthcare-providers/laboratory-services/specimen-collection-documents/collection-and-processing-of-coagulation-specimens/
Storage and Transport:	Transport at room temperature. Specimen needs to arrive within 4 hours of collection.
Schedule of Testing:	Daily
Billing Code:	4010525
CPT Code:	85520

Questions regarding this test should be directed to Elizabeth Madonian, MBA, MT(ASCP), Hematology Manager, at 315-410-7049 or elizabethmadonian@lacny.com.

References:

1. Monitor with Confidence INNOVANCE Heparin A Liquid Heparin Assay, Siemens Healthineers, Siemens Healthcare Diagnostics, Inc., Tarrytown, NY, 2017