
Lab Dept: Coagulation

Test Name: ARIXTRA ASSAY

General Information

Lab Order Codes: ARIX

Synonyms: Fondaparinux Assay

CPT Codes: 85520 – Heparin Assay

Test Includes: Arixtra/Fondaparinux assay level reported in mcg/mL.

Logistics

Test Indications: Fondaparinux is a synthetic anticoagulant with selective inhibition of activated factor X (factor Xa). Fondaparinux induces a conformational change in antithrombin and increases its affinity for factor Xa. Inhibition of factor Xa leads to decreased thrombin generation and thrombus development. Fondaparinux has a half-life of approximately 17 hours which allows once-daily dosing. It is almost completely excreted by the kidneys. Fondaparinux is approved for the prophylaxis and treatment of venous thromboembolic events. Laboratory monitoring of Fondaparinux is possible by utilizing factor Xa inhibitory activity of the drug. Anti-Xa assay (used for monitoring heparin) is modified by using a standard curve constructed with Fondaparinux.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Fairview Diagnostic Laboratories (Fairview Code: ARIX)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 4 – 8 hrs if received during lab hours; with pre-notification, stats are done within 1 hour

Special Instructions: See [Patient Preparation](#). Test must be performed (or processed and plasma frozen) within 3 hours of collection.

Specimen

Specimen Type: Blood

Container:	Blue Top Na Citrate, 3.2% - fill to fill line on tube.
Draw Volume:	2.7 mL (in 3 mL tube) – filled to fill line on tube. (Minimum: 1.8 mL (in 2 mL tube) – filled to fill line on tube.
Processed Volume:	If less than 3 hrs is required for transport, do not centrifuge and send as whole blood. If more than 3 hrs is required for transport, centrifuge for 30 minutes, remove clear, lipid-free plasma, aliquot into 0.3-0.5 mL aliquots into separately labeled polypropylene tubes and immediately place on dry ice or in -70 degree Centigrade freezer.
Collection:	Routine venipuncture. Deliver to the laboratory ASAP.
Special Processing:	Lab Staff: If less than 3 hours is required for transport, do not centrifuge. If more than 3 hours is required for transport, centrifuge for 30 minutes, remove clear, lipid-free plasma, aliquot into polypropylene tubes (3-4 with ~0.5 mL plasma in each tube), and immediately place on dry ice or in -70C freezer. Ship whole blood at room temperature. Whole blood: Must arrive at reference lab within 3 hours of collection. Plasma: Ship processed plasma specimens on dry ice. Must arrive within 48 hours of shipment.
Patient Preparation:	To measure peak plasma level, the sample should be collected 3 hours after drug administration.
Sample Rejection:	Underfilled tubes; overfilled tubes; mislabeled or unlabeled tube; inappropriate processing or storage

Interpretive

Reference Range:	The therapeutic anti-Xa range for fondaparinux has not been established. In patients treated with 2.5 mg fondaparinux daily, the peak steady-state plasma concentration is (on average) 0.39 to 0.50 mcg/mL approximately 3 hours post-dose and the minimum steady-state plasma concentration is 0.14 to 0.19 mcg/mL. In patients treated with 5 mg (body weight <50 kg), 7.5 mg (body weight 50 to 100 kg), and 10 mg (body weight <50 kg), fondaparinux once daily, the mean peak steady state plasma concentration is approximately 1.20 to 1.26 mcg/mL and the mean minimum steady state plasma concentration is approximately 0.46 to 0.62 mcg/mL. [Arixtra prescribing information version September 2013. GlaxoSmithKline, Research Triangle Park, NC and Garcia et al. Chest 2012; 141:e24S-e43S]
Critical Values:	N/A
Limitations:	N/A
Methodology:	Xa assay for Arixtra

References:

[Fairview Diagnostic Laboratories](#) October 2014

Updates:

2/24/2014: Fairview specimen processing update.