

MEMORANDUM

To: OSF System Laboratory Ordering Providers
From: Galen Kessler, MD: Medical Director, OSF Healthcare Saint Francis Medical Center System Laboratory
Subject: Changes to test: Lupus Anticoagulant
Date: January 15, 2019

Effective January 29th, 2019, the OSF HealthCare Saint Francis System Laboratory will change methodologies of detecting Lupus Anticoagulant from Rainbow Scientific method to the Stago method. The new methodology allows for testing of interfering substances and aligns with current CLSI guidelines for Lupus Anticoagulant testing.

The Stago dilute Russell's Viper Venom Time (dRVTT) starts with screening tests for the lupus anticoagulant and interfering substances such as heparin, vitamin K antagonists, and direct thrombin inhibitors. If screening tests are positive, confirmatory tests and/or mixing studies will be performed as appropriate. The final confirmatory test uses a hexagonal phase of phospholipids--instead of linear--which is recognized by many anti-phospholipid antibodies. The previous method by Rainbow Scientific did not allow for the testing of interfering substances or the extra screening with a hexagonal phospholipid.

The lab code for the new Lupus Anticoagulant test is **LAB5035 (LUPAP)**. This updated methodology will be used for the individual lupus test, as well as the lupus test included in the phospholipid panel (**LAB4656**). Any patient with normal screening tests (PT, TT, DRVV screen, and PTT-LA) are considered negative for the lupus anticoagulant and testing will not continue. Testing will also not be performed on patients who have interfering substances in their system and the comment "Unable to Report" will be listed under the remaining screening test lines. Those with abnormal screening tests will auto-reflex to the following confirmatory and/or mixing study tests:

- XA
- DRVV 1:1 mix
- DRVV confirmation
- StaClot LA

A diagnosis of lupus anticoagulant CAN be made through this testing methodology and interpretational comments will be included with results.

Please address any questions to the Special Coagulation Department at 624-9046.

J. Nalinee Upalakalin, MD, Section Chief
Jodee Driscoll, MLS, Hematology Lead

References:

1. CLSI. *Laboratory Testing for the Lupus Anticoagulant; Approved Guideline*. CLSI document H60-A. Wayne, PA: Clinical and Laboratory Standards Institute; 2014.
2. *Clinical Laboratory Hematology*. Shirlyn B. McKenzie, J. Lynne Williams, Kristin Landis-Piwowar. Third Edition. P734-766.
3. Wool, Geoffrey MD PhD. (2018) Lupus Anticoagulant Testing: Managing Interferences and Optimizing Quality [PowerPoint Slides].