



Marshfield Labs™

Laboratory News

VOL. 44, NO. 7 – June 22, 2021

Lupus Anticoagulant Testing Changes with Move to New Platform

Effective June 21, 2021, Marshfield Labs will transition anticoagulant (LA) testing to an Instrumentation Laboratory (IL) platform for operational reasons. The silica clotting time (SCT) will replace the PTT-LA and the result will be reported as a ratio rather than the current difference in seconds. A positive result is > 1.16.

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(Note from Lab Newsletter Vol 44 No. 5 date June 8, 2021: the "PTTLA" listed in the CAPS panel will be replaced by Silica Clotting Time (test code SCT) as the second method of clot-based LA testing, along with DRVVT)

Comprehensive Antiphospholipid Syndrome Panel (Test code CAPS)	
85610	Protime
85730	APTT
85613	DRVVT
85732	Silica Clotting Time
86146x3, 86147x3	Antiphospholipid Antibodies
	Interpretation by pathologist
Varies	Factor assays vary with follow-up

NEW TEST:

Test Code: SCT

Description: Silica Clotting Time

CPT Code: 85732

Specimen: Plasma; Citrated Blue Top



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Lupus Anticoagulant Testing Changes with Move to New Platform, cont.

The DRVVT will continue to be reported as a ratio (*no change to test code*). Positive is > 1.2. The IL DRVVT uses virtually identical reagents as our current assay. During validation the two assays had perfect qualitative concurrence on 39 samples. The SCT also performed similarly to our current PTT-LA on 37 samples with minor disagreement near the positive/negative cut-off as expected giving the differences in reagents and methods.

LA tests are functional clotting assays that incorporate a confirmatory neutralization step with excess phospholipid. They are prone to false positive results in patients receiving oral anticoagulants including warfarin and especially the new direct oral anticoagulant (DOAC) medications. LA testing of patients on these medications is discouraged. Patients should be off of warfarin for at least a week and off of DOACs for 3 days prior to testing. Therapeutic levels of heparin are adequately neutralized by the DRVVT reagent. However, the SCT may be prolonged by heparin.

Lupus Anticoagulant Panel (test code LAPAN)	
85613	DRVVT
85732	Silica Clotting Time

There is no gold standard method for LA testing and the International Society for Thrombosis and Haemostasis recommends performing at least two LA tests when evaluating patients for possible antiphospholipid antibody (APA) syndrome. LA tests can also be ordered as part of our laboratory's comprehensive APA panel (abbreviated CAPS). This panel also includes immunoassays for antibodies to cardiolipin and beta-2 glycoprotein 1; these are not affected by anticoagulation. Note that IgM-only positive results for these two immunoassays may be due to rheumatoid factor rather than a true antiphospholipid antibody. The CAPS panel includes interpretive comments by a clinical pathologist.

Coagulation testing can be confusing for both clinicians and laboratory staff. Methods and reagents are quite variable between different laboratories and often require ongoing adjustments with lot-to-lot changes. Also, various pre-analytical variables can affect results and their proper clinical interpretation; e.g. recent thrombotic events or bleeding, medications, pregnancy, and specimen collection/transport/processing.

Questions:

Test information is available in: Marshfield Labs' Test Reference Manual.

Clinical and technical information:

- Test selection: Coagulation Laboratory staff (715-221-6356)
- Interpretation: Please contact technical specialist, Jill Brantner (715-221-6335); or Clinical Pathologists Dr. Gene Shaw or Dr. Kajal Sitwala (1-800-222-5835)