Lab Dept: Coagulation

Test Name: LUPUS ANTICOAGULANT PROFILE

### **General Information**

**Lab Order Codes:** ALUPP

**Synonyms:** Lupus inhibitor testing; Lupus anticoag reflex panel

**CPT Codes:** See end of document for list of primary and reflex test CPT codes

**Test Includes:** Initial testing includes prothrombin time (PT), activated partial

thromboplastin time (aPTT), and dilute Russell's viper venom time (dRVVT).

**Lupus Anticoagulant Profile Testing Algorithm** 

If the PT, aPTT, and dRVVT are normal, a computer-generated interpretive comment indicating no evidence of a lupus anticoagulant (LA) will be provided.

If PT is greater than 13.9 seconds, PT mix will be performed at an additional charge.

If aPTT is greater than or equal to 38 seconds, aPTT mix will be performed at an additional charge.

If PT, aPTT, or dRVVT are prolonged, thrombin time (TT) will be performed at an additional charge.

If aPTT mix is greater than or equal to 38 seconds and thrombin time is less than 35.0 seconds (no evidence of heparin), platelet neutralization procedure will be performed at an additional charge.

If dRVVT ratio is greater than or equal to 1.20, dRVVT mix and dRVVT confirmation will be performed at an additional charge.

If TT is greater than or equal to 25.0 seconds, reptilase will be performed at an additional charge.

If appropriate, coagulation factor assays, fibrinogen, D-dimer, hexagonal LA, and soluble fibrin monomer will be performed, at an additional charge, to clarify a significant abnormality in the screen test results.

If the factor VIII, IX or V result is below the normal range, the factor inhibitor screen may be performed along with the Bethesda titering assay, if indicated, at an additional charge.

If any test results are abnormal, all results will be reviewed by a coagulation consultant and a lupus anticoagulant interpretation will be provided.

# Logistics

**Test indications:** Confirming or excluding the presence of lupus anticoagulant (LA),

distinguishing LA from specific coagulation factor inhibitors and nonspecific

inhibitors

Investigating a prolonged activated thromboplastin time, especially when

combined with other coagulation studies

This test is not useful for the detection of antiphospholipid antibodies that do

not affect coagulation tests.

**Lab Testing Sections:** Coagulation - Sendouts

**Referred to:** Mayo Clinic Laboratories (MML Test Code: ALUPP)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily

Turnaround Time: 3-5 days

**Special Instructions:** Critical frozen within 4 hours of collection

### Specimen

Collection:

Specimen Type: Blood

**Container:** Light Blue (Buffered Na Citrate 3.2%) top tubes

**Draw Volume:** Optimal: Four x 3 mL tubes, filled to the line to each contain 2.7 mL blood

Minimum: Three x 2 mL tubes, filled to the line to each contain 1.8 mL blood

**Processed Volume:** 4 aliquots with 1 mL each (minimum 3 aliquots with 1 mL each)

• A clean venipuncture is essential, avoid foaming.

• Capillary collection is unacceptable.

• Patient's with a hematocrit level >55% must have a special tube made to

adjust for the hematocrit; contact lab for a special tube.

• Mix thoroughly by gentle inversion. Deliver immediately to the laboratory

at room temperature via courier or pneumatic tube.

Off campus collections:

• Must be processed and frozen within 4 hours.

• Do not refrigerate.

\*Validation of your lab's centrifuge for platelet poor plasma is

required.

#### **Special Processing:**

Lab staff: Centrifuge, transfer all plasma into a plastic vial, and centrifuge plasma again. Aliquot plasma (1-2 mL per aliquot) into 4 separate plastic vials (minimum 1 mL each in 3 vials), leaving 0.25 mL in the bottom of centrifuged vial. Freeze plasma immediately (no longer than 4 hours after collection) at -20 degrees C or, ideally, -40 degrees C or below.

Additional Information: Double-centrifuged specimen is critical for accurate results as platelet contamination may cause spurious results.

Specimen stable frozen for 14 days.

#### **Patient Preparation:**

- 1. Patient should not be receiving anticoagulant treatment (eg, warfarin, heparin). Treatment with heparin causes false-positive results of in vitro coagulation testing for lupus anticoagulant. Coumadin (warfarin) treatment may impair ability to detect the more subtle varieties of lupus-like anticoagulants.
- 2. Patient should also not be receiving fibrinolytic agents (streptokinase, urokinase, tissue plasminogen activator: tPA).
- 3. If patient has been recently transfused, it is best to perform this study pretransfusion, if possible.

#### **Sample Rejection:**

Gross hemolysis, lipemia or icterus; unlabeled or mislabeled specimens; specimens incorrectly processed.

# Interpretive

**Reference Range:** An interpretive report will be provided

**Critical Values:** Activated Partial Thromboplastin Time, Plasma ≥ 150 sec

Fibrinogen ≤ 60 mg/dL

INR (International Normalizing Ratio) ≥ 5.0

Limitations: n/a

Methodology: PTSC, APTSC, DRV1: Optical Clot-Based

**References:** Mayo Clinic Laboratories February 2025

## **CPT CODES**

85610

85730

85613

85390

85130 (if appropriate)

85130 (if appropriate)

85210 (if appropriate)

85220 (if appropriate)

85230 (if appropriate)

85240 (if appropriate)

85245 (if appropriate)

85246 (if appropriate)

85247 (if appropriate)

85250 (if appropriate)

85260 (if appropriate)

85270 (if appropriate)

85280 (if appropriate)

85335 (if appropriate)

85335 (if appropriate)

85335 (if appropriate)

85366 (if appropriate)

85379 (if appropriate)

85384 (if appropriate)

85385 (if appropriate)

85390-26 (if appropriate)

85397 (if appropriate)

85597 (if appropriate)

85598 (if appropriate)

85611 (if appropriate)

85613 (if appropriate)

85613 (if appropriate)

85635 (if appropriate)

85670 (if appropriate)

85732 (if appropriate)

**Updates:** 2/6/2025: Initial entry, replaces retired in-house LUPI