COAGULATION TEST NAMES REFERENCE GUIDE

Factor X activity, Chromogenic or Anti-Xa heparin assay?

Coagulation Factor X Chromogenic Activity Assay (done at Ridgeview) FXCH

Monitoring warfarin anticoagulant therapy, especially in patients whose plasma contains lupus anticoagulants that interfere with baseline prothrombin time/INRs and in patients receiving Argatroban who are being transitioned to warfarin.

Factor X activity assay (sent out rarely ordered) F_10

- Diagnosing deficiency of coagulation factor X, congenital or acquired
- Evaluating hemostatic function in liver disease
- Investigation of prolonged prothrombin time or activated partial thromboplastin time.

Heparin anti-Xa assay (Ordered Often done at Ridgeview) Hepxa

- **Direct measurement of Unfractionated heparin concentration**
- Allows patients to reach a therapeutic range more rapidly.
- No interferences from Lupus anticoagulant or other factor deficiencies as were found with aPTT measurements.

Heparin anti-Xa assay (sent out) HEPTP

Useful for measuring heparin concentration:

- **In patients treated with low molecular weight heparin preparations**
- In presence of prolonged baseline activated partial thromboplastin time (APTT) (eg, lupus anticoagulant, "contact factor" deficiency, etc.)
- When unfractionated heparin dose needed to achieve desired APTT prolongation is unexpectedly higher (>50%) than expected

Which Factor V assay do I need?

Factor V Leiden Mutation test (sent out Ordered Often) F5DNA

- Patients with clinically suspected thrombophilia and:
    - 1. Activated protein C (APC)-resistance either proven or suspected by a low or borderline APC-resistance ratio
    - 2. A family history of factor V Leiden
- This assay will only detect the *F5* c.1601G>A; p.Arg534Gln (rs6025) variant associated with factor V Leiden thrombophilia. To detect other pathogenic alterations in the *F5* gene of a patient with a laboratory diagnosis of coagulation factor V deficiency, order F5NGS / *F5* Gene Next Generation Sequencing, Varies.

- This assay will not will not detect alterations in individuals with activated protein C (APC)-resistance caused by mechanisms other than the *F5*:c.1601G>A, p.Arg534Gln variant. Coagulation-based activated protein C (APC)-resistance ratio (mixing with factor V-deficient plasma) is recommended as the initial screening assay for APC-resistance. Depending on the assay system, the APC-resistance ratio may be indeterminate for patients with a lupus anticoagulant or extremely high heparin levels. For more information, see APCRV / Activated Protein C Resistance V (APCRV), Plasma or APCRR / Activated Protein C Resistance V (APCRV), with Reflex to Factor V Leiden, Blood and Plasma.

Factor V activity assay (rarely ordered) FACT5 Mayo Code: FACTV

- Diagnosing congenital deficiencies (rare) of coagulation factor V.
- Evaluating acquired deficiencies associated with liver disease, factor V inhibitors, myeloproliferative disorders, and intravascular coagulation and fibrinolysis.
- Investigation of prolonged prothrombin time or activated partial thromboplastin time.

Commonly Used Coagulation Profiles Available: Mayo Medical Laboratory

- **Thrombophilia Profile (CHYPE)** Mayo Code: AATHR
  - Evaluating patients with thrombosis or hypercoagulability states
  - Detecting a lupus-like anticoagulant; dysfibrinogenemia; disseminated intravascular coagulation/intravascular coagulation and fibrinolysis
  - Detecting a deficiency of antithrombin, protein C, or protein S
  - Detecting activated protein C resistance (and the factor V R506Q [Leiden] mutation if indicated)

- **Lupus Anti-Coagulation Profile (CLUP)** Mayo Code: ALUPP
  - Confirming or excluding presence of lupus anticoagulant (LAC) distinguishing LAC from specific coagulation factor inhibitors and nonspecific inhibitors
  - Investigation of 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. We recommend separate testing for serum phospholipid (cardiolipin), IgG and IgM (CLPMG) and beta-2 glycoprotein 1, IgG and IgM (B2GMG).

- **von Willebrand Profile (VONW)** Mayo code: AVWPR
  - Detection of deficiency or abnormality of von Willebrand factor and related deficiency of factor VIII coagulant activity
  - Subtyping von Willebrand disease as Type 1 (most common), Type 2 variants (less common), or Type 3 (rare)
  - This test is **not useful for** detection of hemophilia carriers.