Clinical Laboratory Test Update

New Coagulation Assays to be performed at Poudre Valley Hospital Laboratory starting July 15, 2025

Poudre Valley Hospital Laboratory will begin performing the assays listed below on the Werfen ACL TOP 550.

Test Name	Lab Test Code	CPT	Reference Range	Notes
Apixaban Anti-Xa Level	LAB7868	80299	Therapeutic reference ranges have not been established.	This assay is not for monitoring heparin (UFH or LMWH). Presence of heparin will falsely elevate apixaban anti-Xa levels. This assay is not a stand-alone test and should be used in conjunction with other clinical and laboratory findings.
Heparin-Induced Thrombocytopenia Antibody, Without reflex	LAB4761	86022	negative	Aids in determining the risk for heparin induced thrombocytopenia (HIT) when used in conjunction with other laboratory and clinical findings. The positive or negative result should be used with other information, including the clinical context, in forming a diagnosis such as the 4T Score and the 2013 American Society of Hematology guidelines.
Heparin-Induced Thrombocytopenia Antibody, With SRA reflex	LAB3483	86022	negative	If positive, Serotonin Release Assay will reflex to ARUP and add CPT 86022.
Free Protein S Antigen	LAB492	85306	59-147 %	Protein S deficiency may be hereditary or acquired. Acquired deficiency may be observed during pregnancy, during oral anticoagulant therapy, during oral contraceptive use, and in liver disease. Levels appear as deficient in newborns. Age and hormonal status may affect results for females. Results should be used with other information, including the clinical context, in forming a diagnosis.
Rivaroxaban Anti-Xa Level	LAB8450	80299	Therapeutic reference ranges have not been established.	This assay is not for monitoring heparin (UFH or LMWH). Presence of heparin will falsely elevate rivaroxaban anti-Xa levels. This assay is not a stand-alone test and should be used in conjunction with other clinical and laboratory findings.
Von Willebrand Factor Activity	LAB3539	85245	55-200 %	Results should be used with other information, including the clinical context, in forming a diagnosis. This assay should not be used as the sole basis for therapy decisions.
Von Willebrand Factor Antigen	LAB757	85246	55-200 %	Results should be used with other information, including the clinical context, in forming a diagnosis.
Von Willebrand Factor Panel	LAB8919	85240 85245 85246	See individual tests	Includes: • F VIII activity • vWF Activity • vWF Antigen

Coagulation Assays to change methodology at Poudre Valley Hospital Laboratory

Poudre Valley Hospital Laboratory will transition performance of the assays listed below from the Diagnostica Stago STA-R to the Werfen ACL TOP 550 as current reagent supplies are exhausted, beginning July 1. A result comment will be added to note the new method and reference range change once that assay changes over.

Test Name	Lab Test Code	CPT	NEW Reference Range	Current Reference Range	Notes
ANTITHROMBIN III ASSAY	LAB4217	85300	83-128%	75-135%	This assay can be used to exclude or diagnose hereditary deficiency in patients with a tendency towards thromboembolism, in pre-operative stages, before prescription of oral contraceptives, DIC, nephrotic syndromes, liver diseases, and in therapy with heparin or Antithrombin concentrates.
FACTOR VIII ACTIVITY	LAB306	85240	50-150 %	60-160 %	Indicated for use on patients who are suspected of congenital or acquired deficiency based on APTT results. Congenital deficiency leads to Hemophilia A, and decreased levels may also be associated with von Willebrand disease, or acquired due to other diseases such as DIC.
PROTEIN C ACTIVITY	LAB489	85303	70-140 %	80-180 %	Acquired deficiencies of Protein C are associated with hepatic disorders, oral anticoagulant therapy, and DIC. Levels are low in neonates and infants, and increase to adult levels by adolescence. Aprotinin is known to inhibit activated Protein C, thus low Protein C activity may be observed in aprotinin treated patients.
PROTEIN S ACTIVTY	LAB3575	85306	64-149 %	Male: 65-150 % Female: 60-150 %	Protein S deficiency may be hereditary or acquired. Acquired deficiency may be observed during pregnancy, during oral anticoagulant therapy, during oral contraceptive use, and in liver disease. Levels appear as deficient in newborns. Age and hormonal status may affect results for females. Results should be used with other information, including the clinical context, in forming a diagnosis.

LUPUS ANTI-COAGULANT PANEL	LAB8275	85730 85613	PTT Screen: 25.1-36.5 sec DRVV Screen, Confirm, and Normalized Ratio: <=1.20 ratio Silica Clotting Time Screen, Confirm and Normalized Ratio: <=1.16 ratio	PTT Screen: 30-45 sec DRVV Screen, Confirm, and Normalized Ratio: <=1.20 ratio STAClot Hex Phase Neutrali-zation Delta: <=13.8 sec	Screening tests performed, then mixes, confirmations, and Normalized ratio will reflex if screen is elevated. Thrombin Time and Anti-Xa will be performed if screens are positive before any confirmations or mixes to detect the presence of anticoagulants as they cause false positives in these assays.
THROMBIN TIME	LAB324	85670	10.3-16.6 seconds	>1 month old: 16-20 seconds <=1 month old: 15.0-21.3 seconds	Results may be affected by many commonly administered drugs, and further studies should be made to determine the source of unexpected abnormal results.

Sample Stabilities

Assay	**Room Temp Whole Blood or Platelet-poor Plasma**	**Frozen Plasma**
AT III	72 hours	Varies by test; at least 1 month at ≤ -20°C
Protein C Activity	48 hours	
Protein S Activity	4 hours	
Free Protein S Antigen	24 hours (must test within **2 hours** of thawing)	
Factor VIII Activity	4 hours	
Lupus panel	4 hours	
vWF Activity	48 hours	
vWF Antigen	48 hours	
HIT Antibody	4 hours	
Apixaban Rivaroxaban	• 2 hours whole blood • 24 hours plasma	

Specimen Collection: A waste tube must be collected prior to the Sodium Citrate tubes and discarded into waste. Fill tubes to the appropriate line as indicated by the black arrow.

Specimens requiring recollection: Hemolyzed, clotted, too old, mishandled, under/over-filled, and refrigerated or frozen whole blood will be recollected.