Clinical Laboratory Test Update

Effective Date: Wednesday, April 23, 2025

PFA-100 Platelet Function

Effective Wednesday, May 21, 2025, Poudre Valley Hospital Laboratory will discontinue PFA-100 Platelet Function Testing. Alternate testing available in the North Region is detailed below.

VerifyNow Aspirin and PRU (P2Y12) Tests – Available at Poudre Valley Hospital Laboratory starting April 23, 2025

VerifyNow testing measures platelet induced aggregation. The Aspirin Test measures platelet response to aspirin, and the PRU (P2Y12) Test measures response to a P2Y12 inhibitor. If either has produced the expected antiplatelet effect, aggregation will be reduced and results are reported as the extent of that platelet aggregation.

Test Name	Lab Test Code	CPT	Units	Reference Range	Interpretation
VerifyNow Aspirin (ARU Test)	LAB8824	85576	Aspirin Reaction Units (ARU)	Pre-aspirin samples: **620-672 ARU**	**≥ 550 ARU** = Platelet dysfunction consistent with Aspirin has not been detected **< 550 ARU** = Platelet dysfunction consistent with Aspirin has been detected
VerifyNow PRU (P2Y12 Test)	LAB8399	85576	P2Y12 Reaction Units (PRU)	Baseline value pre-drug: **182-335 PRU**	Values **<180 PRU** may be evidence of a P2Y12 inhibitor effect

Specimen Requirements: Whole Blood collected in 2 (two) Greiner **2mL partial fill blue top** tubes containing 3.2% Sodium Citrate for each test required. This is the only tube type acceptable for this testing. Full-draw sodium citrate tubes cannot be tested and will require recollection.

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 cannot be sent through a pneumatic tube system and must be hand-delivered to the laboratory.

Specimen Stability: 4 hours post collection

Specimens requiring recollection: Hemolyzed, clotted, too old, mishandled, under/over-filled, refrigerated, frozen, centrifuged, or samples sent through a pneumatic tube system will be recollected.

TEG Platelet Mapping – Currently performed at Medical Center of the Rockies Laboratory

Platelet mapping is intended for in vitro diagnostic use to provide qualitative assessment of platelet function by measuring the effects of antiplatelet drug therapy on platelet function. The TEG Platelet Mapping Panel is indicated in patients >18 years old where the evaluation of blood hemostasis properties is desired in cardiovascular surgery and cardiology procedures to assess hemorrhage or thrombosis conditions.

Platelet mapping will provide a baseline assessment of platelet function (MA), a fibrin clot test, and platelet inhibition/aggregation at two main pathways: ADP (Plavix, Brilinta, Effient, etc) and AA (Aspirin/NSAIDs).

Antiplatelet drugs, whose efficacy can be tested, include the following:

- ADP receptor inhibitors such as clopidogrel and ticlopidine
- Arachidonic acid (AA) pathway inhibitors such as aspirin
- GpIIb/IIIa inhibitors such as abciximab, tirofiban and eptifibatide

TEG PLATELET MAPPING

TEST NAME	TEG PLATELET MAPPING
Lab Test Code	LAB2027
Acceptable Specimen	Sodium Heparin (Dark Green, No Gel) Note: Discard Tube Required
Specimen Collection	To ensure accurate results: • Samples must be collected at MCR. • Use 19-21-gauge collection needles. • Draw a discard Sodium Heparin waste tube prior to collecting sample. • Fill tube to nominal marking near top of label. • Mix tubes immediately upon collection to prevent clotting. • Samples may NOT be sent through the pneumatic tube system and must be hand carried to the lab.
Specimen Stability	Room Temperature: 2 hours Refrigerated: Unacceptable Frozen: Unacceptable
Performed	Sunday through Saturday
CPT	85576

REFERENCE INTERVALS

TEST NAME	REFERENCE INTERVAL
HKH-MA (Kaolin w/ Heparinase Max Amplitude)	53 – 68 mm
ActF-MA (Max Amplitude):	2 – 19 mm
ADP-MA (Max Amplitude)	45 – 69 mm
ADP % Inhibition	0 - 17 %
ADP % Aggregation	83 – 100 %
AA-MA (Max Amplitude)	51-71 mm
AA % Inhibition	0-11 %
AA % Aggregation	89-100 %