Platelet Testing Assay Descriptions and Sample Requirements

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Test Name	Description	Collection Information
Aspirin Resistance	The VerifyNow Aspirin Test utilizes arachidonic acid as the agonist to measure the antiplatelet effect of aspirin.	• Samples should be collected between 2 and 30 hours after ingestion of aspirin. **MUST** be collected in a Greiner BioOne Sodium Citrate Vacuette tube. Please contact lab to obtain this tube. • Keep blood at room temperature and test must be run within 4 hours of collection.
P2Y12 Test (Thienopyridines Monitor)	The VerifyNow P2Y12 Test uses an ADP agonist to induce platelet activation and ascertain the level of platelet reactivity impaired by thienopyridines such as clopidogrel or prasugrel or who have discontinued them prior to surgery.	• **MUST** be collected in a Greiner BioOne Na Citrate Vacuette tube. Please contact lab to obtain this tube. • Keep blood at room temperature and test must be run within 4 hours of collection.
Platelet Aggregation, Plasma	The aggregation includes exposure to the following agonists: Collagen, Epinephrine, Archidonate, TRAP, ADP, and Ristocetin. Testing of the 9-14 agonist concentrations are performed reflexively. A CBC/Diff will also be performed.	• Contact lab before drawing. **MUST BE SCHEDULED.** • Six 4.5 mL Na Citrate and one 3 mL EDTA
Platelet Function/Aggregation Panel (includes the following tests) • Platelet Aggregation, Plasma • Platelet Glycoprotein Quantitation • Platelet Quinacrine Uptake and Release • CBC with Differential & Retic	The aggregation panel includes testing of all agonists in the Platelet Aggregation as well as the glycoprotein and quinacrine analysis by flow cytometry, and CBC/Diff.	• Contact lab before drawing. **MUST BE SCHEDULED.** • Six 4.5 mL Na Citrate, one 2.7 mL Na Citrate, and one 3 mL EDTA
Platelet Glycoprotein Quantitation	This flow cytometry assay looks at the expression of surface platelet glycoproteins GMP140 (CD62p), GpIIB (CD41), and GpIb (CD42b) at the resting state and after Thrombin Receptor Agonist Peptide (TRAP) activation.	• Contact lab before drawing. **MUST BE SCHEDULED.** • One 4.5 mL (or 2.7mL) Na Citrate.
Platelet Quinacrine Uptake & Release	This flow cytometry assay tests for storage pool deficiency and dense granule release defects based on the selective binding of the fluorescent dye quinacrine to adenine nucleotides in the dense granules of platelets. Whole blood is incubated with quinacrine and a platelet surface antibody (CD42) in the presence and absence of a platelet agonist.	• Contact lab before drawing. **MUST BE SCHEDULED.** • One 4.5 mL (or 2.7mL) Na Citrate.
Platelet Aggregation, Ristocetin Only	The Ristocetin only aggregation includes exposure to 6 concentrations of ristocetin. An additional concentration will be performed, reflexively, if results are abnormal. a CBC/Diff will also be performed.	• Contact lab before drawing. **MUST BE SCHEDULED.** • Four 4.5 mL Na Citrate and one 3 mL EDTA

For All Platelet Testing:

- Samples must be kept at room temperature and received by the performing lab **IMMEDIATELY.**
- Do not use a pneumatic tube system to transport samples and do not expose tubes to agitation as this can activate the platelets and cause erroneous results.

V1-29-2021