



COAGULATION CONSULTANTS LABORATORY

1640 Elk. Blvd. Des Plaines, IL 60016

TEL: (847) 954-1134 • FAX: (847) 954-1136 • Pager: (800) 714-4776

RECENT GENETIC TESTING AT COAGULATION CONSULTANTS.

Please be advised that our laboratory is able to supply you with the currently available genetic testing for Coumadin (Warfarin) and shortly Clopidogrel (Plavix) which are currently listed and recommended in the drug's labeling (by FDA mandate) along with dosage recommendations.

In terms of available population studies for Coumadin, there is a significant reduction in hospitalizations (approximately 30%) for over and under dosages as a result of genetic pharmacologic guidance for this drug (900 patients). Many other studies were used to derive the specific genetic mutations and how they are involved with metabolism of this drug and the regeneration of Vitamin K(1,2) by the liver enzymes. The importance of this type of genetic analysis can be circumvented by routine (daily) monitoring of the Prothrombin Times to provide the needed adjustments to achieve a stable dosage that fits with the patient's metabolism, drugs and diet. Published articles have established that self monitoring is a satisfactory way to achieve patient compliance without having the patient to visit the clinic every day.

Similarly, diminished antiplatelet responses to Clopidogrel (Plavix) have been described in 21 studies (4,500 subjects) demonstrating the genetic variables involved with the metabolic conversion of Clopidogrel to its active form (3). Many of the problems associated with Clopidogrel responses can be attributed to its metabolism from the prodrug to its active form, and these can arise from genetic mutations or from drug-drug interactions in the liver enzymes that metabolize the drugs. The genetic testing will anticipate the defects in its metabolism and therefore establish a faster response to the desired dosage. However, the final decision of the desired antiplatelet effect will be assessed by an Optical Platelet Function Analysis and how the platelets respond to ADP agonists. This is especially important when Plavix is combined with Aspirin, which can be associated with a bleeding diathesis in some patients. For more details on the Optical Platelet function analysis see the article entitled Plavix monitoring.

Since we can foresee a new demand for these genetic tests as a result of published reports, we would like to inform you that we can perform these tests in a timely fashion and at a significant cost savings over most alternatives. Please call us (847) 954-1136 for information since our new requisitions are not available yet.



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