

**DNA STORAGE: TODAY'S PERSONALIZED MEDICINE, TOMORROW'S CURE**

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Molecular diagnostic methods are labor-intensive, requiring expertise with specific experience. The information has vast potential. Recently, academic and research institutions have begun integrating molecular testing in their labs. This all started after the inception of the human genome project that led to improved sequencing methods and genome mapping. Pharmacogenomics holds great promise to mention only one fragment of the whole. It can tailor a specific drug to the one and only patient it can cure. For example, it used to be that herpes simplex virus needed a brain biopsy for diagnosis; now, only cerebrospinal fluid is needed and it can be detected by DNA methods; "specialty lab" provides a pharmacogenomic test Warfarin (Coumadin) genotyp r™ cyp<sub>2C9</sub> to identify patients at risk for Warfarin-induced bleeding complications. Statistics show that 5% of Caucasians are poor metabolizers and require 3-5 fold dosage reduction to avoid adverse reactions. 40% are intermediate metabolizers who may start at the lowest dose while avoiding drug therapy that utilizes the same pathway.

Although, Plavix has been prescribed for those sensitive to Warfarin, there are now some concerns. The science of DNA is changing the narrative of our lives as we discover who we are and where we came from. By unlocking the secrets in our blood, we are tracing our genuine roots and the lessons range from our propensity for disease to the truth that we are all a lot more alike than we think.