

From pharmacogenetics to personalized medicine: Regulatory perspectives and implications for Latin American countries

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The science of pharmacogenomics has advanced significantly in the last five years, but it is still in infancy and is mostly used on research basis. The Pharmacogenomics helps identify inter individual variabilities in drug response (both toxicity and effectiveness). This information will make it possible to individualize therapy with the intent of maximizing effectiveness and minimizing risk. The aims of this work are to present the bases of pharmacogenetic, the advantage and challenges of this specialty, the main enzymes characterized for the genetic polymorphism and the world and Cuban regulatory perspective about this subject. We will show the main advantages and disadvantages of this type of research for Latin American countries.

The hope for the future is that through personalized medicine, doctors and patients will be able to make better-informed choices about treatment. This treatment will avoid the adverse drug reaction to the medication and will improve the diagnosis diseases as well as the prevention and treatment of diseases.

Biography

Diadelis Remirez Figueredo received her B.A. degree (1990, Biochemistry) from Faculty of Biology, Havana University, Cuba, and both her M.Sc. (1995, Biomedicine) and Ph.D. (1999 Pharmaceutical Sciences at the age of 29 years) degree from National Center for Scientific Research in Havana, and most of the results were done in the Department of Toxicology at the Free University in Amsterdam. Postdoctoral training in Molecular Toxicology and pharmacology was completed at the Faculty of Pharmacy in Toronto, Canada.

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