Predictive medicine evolution

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Predictive medicine (PM) as a kid from natural marriage of Human Genome and Medicine has now converted into quickly expanded area of medical genetics. Main goal of PM may be attributed to early identification of persons, predisposed to severe complex diseases, before their obvious clinical manifestation and thus to their prediction, prevention, diagnostics and efficient personalized treatment. Progress of PM runs in parallel to spectacular achievements of human genome studies, advances of molecular technologies and their implementation. Started in 2000 as Predictive Preventive Personalized Medicine (3P-Medicine), it soon acquired its participatory trait and is now treated as 4P-medicine. After short period of recession in 2009-2012 provoked by “missing heritability”, dilemma time for the robust recovery of PM comes. New system genetics approach (SGA) paved the way to translational medicine, which obviously benefits stems from the complex analysis of common disorders. Brief review of European PPPM Association program of 30 years development and similar precision medicine program recently launched in the USA are presented. Thus for 20 years period, the PM has passed a long way from primitive genetic testing to systemic genetic analysis, from Genetic Pass suggested, as far as 2000 to Electronic Genetic Chart of Health predicted in 2015.

Biography

Vladislav S Baranov graduated from the State Medical Institute in Lvov (Ukraine) and took Post-graduate courses and received a PhD degree in Saint-Petersburg (Russia) in 1976. He is the Chief of laboratory for prenatal diagnosis of inherited and inborn diseases at the Ott’s Institute of Obstetrics, Gynecology & Reproduction. He is interested in genetic and cytogenetic aspects of early development, gene testing of inherited predisposition to common disorders, personalized predictive medicine and gene therapy. He is a Professor, Corresponding Member of Russian Academy of Sciences, Honorary Scientist and Chief City Expert in Medical Genetics. He is the author and co-author of 29 books and over 400 scientific papers.

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