OMICS Group
Conferences
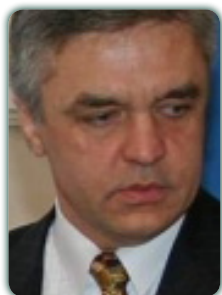### Accelerating Scientific Discovery

2nd International Conference on
Predictive, Preventive and Personalized Medicine & Molecular Diagnostics
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Predictive, preventive and personalized medicine (PPPM) as being an integrative part of healthcare services to move ahead

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The medicine is undergoing a paradigm shift to strive from the diagnosis and treatment for *prediction* and *prevention.* And, for sure, any innovations in healthcare services are an important driver to move the new trend forward. A new systems approach to disease to pay its crucial attention on the trend would result in a new branch in the healthcare services, namely, *predictive, preventive* and *personalized medicine (PPPM)*. The latter is defined as: "…the capacity *to predict* disease development and influence decisions about lifestyle choices or to tailor medical practice to an individual…"

As the baby boomers age, the number of people living with chronic conditions will grow dramatically. For instance, forty six million more Americans are projected to have at least one chronic condition in 2030 than in 2000. Meanwhile, all chronic disorders develop gradually over a period of time to take years for a process to reach a level where it could be diagnosed definitively and treatment initiated properly and in time before changes are irreversible! And, for example, Parkinson's costs society $27 billion *per* year in medical bills and lost wages; worldwide, projected cases of Parkinson's will more than double by 2030!

To achieve the practical implementation of *PPPM* concept, it is necessary to create a fundamentally new strategy based upon the *subclinical* recognition of *biopredictors* of hidden abnormalities long before the disease clinically manifests itself. This strategy would give a real opportunity to secure *preventive* measures whose *personalization* could have a significant influence on demographics!

Two key objectives of *PPPM* are:
   (i)   detection of *subclinical* abnormalities with a selection of suitable targets for the next step of PPPM protocol, i.e., *drug-based prevention*;
   (ii) drug-based correction of the abnormalities detected under the heading of *preventive* measures.

PPPM is thus a medical model being tailored to the individual and dictates a construction of *PPPM* algorithms to *diagnose,* to *predict,* and *to prevent* in time!

The key benefits of PPPM include new abilities:
   (i)   to detect disease at a *subclinical* stage, when it is easier and less expensive to treat effectively;
   (ii)   to stratify patients into groups that enable the selection of optimal *preventive* treatment;
   (iii) to reduce adverse drug effects by more effective early assessment of individual drug responses;
   (iv)   to improve the selection of new *molecular targets* for drug discovery;
   (v)   to shift the emphasis from illness to wellness.

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Page 27