Translational Research and the P4 Approach in the Service of Sustainable Health Care

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Recognized as a need in the late 20th century and put in action in the first decade of the 21st century, translational science connects public scientific institutions, the academic community and industry. It has resulted as the call for more efficient discovery of new drugs and stronger bonds between fundamental research and clinical practice.

Interest and support of the pharmaceutical industry for translational science is fully in accordance with the goal of cutting overall costs and discovering new drugs, primarily by reducing the duration of the very demanding pre-clinical and clinical assessment of new chemical or bio-therapeutic entities. By utilising the possibilities of translational research and translational medicine through the tailor-made trails, the whole productivity of the drug discovery and development will be improved. Particularly, number of compounds entering into the clinical development will be increased and in the same time, attrition rate in the late phases of clinical development will be substantially reduced.

Moreover, new initiatives in healthcare today are based on the so-called P4 principles. They include: predictive, preventive, personalized and participatory medicine and approaches. Through these principles the vast majority of the new technologies, biomedical industry applications, scientific knowledge and emerging technical innovations can be directly applied in order to achieve sustainable human welfare.