
PLENARY 1

Precision Medicine Using Genomics: Transforming Healthcare

A Rahman A Jamal

Precision medicine is about giving the right treatment to the right patient at the right time. It is already transforming healthcare in developed and some developing nations, including providing the impetus for a value-based healthcare system. Precision medicine using genomics is already used in cancer care especially in terms of risk identification, better diagnosis, prognostication and targeted therapies. The precision medicine approach has also improved the diagnosis of rare diseases with successful diagnosis in 30-40% of cases. Pharmacogenomics has the potential to avoid adverse drug reactions and improve efficacy. Precision medicine is moving rapidly into precision health with the aims of enabling the 4Ps of medicine i.e. personalised, preventive, predictive and participatory. The transformation will not only results in a healthier population but significant cost-savings. To achieve this, we need policy change, political will, and bringing the key stakeholders together including the government, academia, and the industry.

Keywords: Precision medicine, genomics, diagnosis, prognostication, pharmacogenomic

International Journal of Human and Health Sciences Supplementary Issue 02, 2024

DOI: <http://dx.doi.org/10.31344/ijhhs.v8i40.741>

Correspondence to: Datuk Professor Dr. A Rahman A Jamal. Founding Director and Senior Principal Research Fellow, UKM Medical Molecular Biology Institute (UMBI), Universiti Kebangsaan Malaysia. Email: rahmanj@ppukm.ukm.edu.my
