

## ATP metabolism as biomarker target for cardiovascular protection and toxicity

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Although clinical drug development has made significant stride along with pharmaceutical sciences over the last 3 decades, from the application of pharmacokinetics in the 1970's, controlled clinical studies for efficacy in 1980's, pharmacodynamics and pharmacogenetics in the 1990s, to a focus on drug safety in the past decade, the success rate to introduce new effective and safe therapeutic agents has not kept up with expectations from the financial investment and those of patients. In another word, there is inadequate improvement in drug therapy or financial reward. Identification and application of biomarkers for lead selection and optimization has been heralded as one of the most likely scientific approach to increase the success of drug development. It is widely conceived that biomarkers are the scientific basis and effective tools for disease management and personalized medicine. The presentation will focus on the potential of using ATP metabolism as biomarker target for cardiovascular protection and toxicities, and regulation of cardiovascular homeostasis. It will also discuss the opportunities, challenges and obstacles of exploiting ATP metabolism as targets for drug development and personalized medicine, and how government regulatory and funding agencies may expedite to advance the course of biomarker discovery and development.

### Biography

Pollen Yeung completed his Ph.D. at the age of 30 years from University of Saskatchewan (Saskatoon, SK, Canada) and is currently Professor of Pharmacy and Medicine at Dalhousie University in Halifax, NS, Canada. He has published more than 60 papers in reputed journals and has been serving as an editorial board member for Recent Review of Clinical Trials, Drug Metabolism Open Journal, Medical Sciences Monitor, Metabolites, Cardiovascular Pharmacology Open Access, and Natural Products Chemistry and Research Open Access.

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