OMICS Group
Conferences
Accelerating Scientific Discovery

3rd World Congress on
Cancer Science & Therapy

October 21-23, 2013   DoubleTree by Hilton Hotel San Francisco Airport, CA, USA

PM$_{10}$-bound polycyclic aromatic hydrocarbons: A key factor in lung carcinogenicity in urban environments under heavy sources of emission

A. P. Wickramasinghe
National Veterinary Research Institute, Sri Lanka

Polycyclic aromatic hydrocarbons (PAHs), one of persistent organic pollutants ubiquitous in the atmosphere, may be a major etiological factor in lung carcinogenicity. This lecture primarily will address the development and optimization of RP-HPLC/UV based analytical method for the routine identification and quantification of US EPA prioritized 16 PAHs with subsequent application for assessing inhalation exposure levels of PM$_{10}$-PAHs and their source apportionment at different morphological and demographical localities in the world heritage city Kandy, Sri Lanka. Over the high levels of PAHs and associated risks, the discussion will focus on setting priorities for prevention of cancer through control of human exposure to PAHs in Kandy, but applicable to similar cities in the world too.

Accordingly, instead of the conventional practice of risk quantification with 'continuous lifetime exposure', which seems to be truly 'theoretic', I suggest probabilistically modified framework to the point estimate approach of risk assessment with more realistic exposure scenarios for 'less-than-lifetime exposures' averaging over critical windows of exposure to determine how the effects vary with dose and/or duration, comparably based on both 'B[a]P toxic equivalents approach' and 'B[a]P surrogate epidemiological approach' of risk quantification under different source scenarios. Furthermore, it addresses the toxicological importance of the atmospheric air PAH concentration and evaluates for the biological indicators of ambient air PAHs in general as well as under different sources of emission in Kandy, with re-appraisal on occupationally based classical indicator B[a]P. In addition the house will be illustrated with evidence-based risk managerial strategies using 'source-exposure-effect relationship' established in Kandy.

Biography

A. P. Wickramasinghe graduated with honours from the Faculty of Veterinary Medicine & Animal Science, University of Peradeniya with distinctions, gold medal and scholarship for the best performance in 1994. After her PG Dip in EPC Eng (2005), she obtained the Ph.D. in Environmental Sciences from the Faculty of Engineering, University of Peradeniya, Sri Lanka in 2012. While her work has been published in Atmospheric Environment, (2011) and Chemosphere (2012) with reproduction by many, she has presented at international conference 'Planet under Pressure-2012' in London. Dr. Wickramasinghe has served as an invited reviewer for 'Atmospheric Environment' and 'Atmospheric Pollution Research'.

Barriers to the application of personalized medicine in elderly patient with cancer

Yakir Rottenberg
Hadassah-Hebrew University Medical Center, Israel

The risk of cancer among older people is about ten-fold greater than in younger age groups. The data on the efficacy and toxicity of cancer treatment at this age group is sparse. The emergence of personalized medicine in the last years has enabled us to optimize prescribing by steering patients to the right drug at the right dose at the right time. Application of data from younger age groups to elderly is problematic, mainly in the oldest age group. The lecture will be focused in the molecular and clinical differences between profiles of cancer among the elderly compared with younger age groups, as well as change in the pharmacokinetics and pharmacodynamics related to cancer regimens. Available data on targeting treatment focusing on the elderly population will be presented. In addition to these subjects, attendees of this lecture will be familiarized with the main geriatric assessment tools which have been validated in cancer patients.

Biography

Yakir Rottenberg is an expert in Oncology (since 2009) and Geriatric (since 2012) from the Hadassah-Hebrew University Medical Center. His research includes genetic and environment testing as risk factors for illness and mortality. Dr. Rottenberg previously headed the project of forming a national data base for mortality risk factors. He holds a master in public health (MPH) in biostatistics and epidemiology from the Hebrew University in Jerusalem.

J Cancer Sci Ther 2013
ISSN: 1948-5956, JCST an open access journal

Cancer Science-2013
October 21-23, 2013

Volume 5 Issue 10

Page 267