Biomedical integrative approach to oncology: from vitamins to cellular therapy

Roni Lara Moya
CESPU University, USA

Despite all efforts and scientific development in cancer research and treatments, the corresponding estimates for total cancer deaths in 2012 were 8.2 million (about 22,000 cancer deaths a day) – 2.9 million in economically developed countries, and 5.3 million in economically developing countries. By 2030, the global burden is expected to grow to 23.6 million new cancer cases and 13 million cancer deaths imply due to the growth and aging of the population. However, the estimated future cancer burden will probably be considerably larger due to the adoption of lifestyles that are known to increase cancer risk, such as smoking, poor diet, obesity, physical inactivity, chronic inflammatory diseases, etc. Cancer can actually be defined by a group of diseases characterized by the interaction between abnormal cells with its natural environment, resulting in uncontrolled growth and spread of these abnormal cells. If the spread is not controlled, it can result in death. Cancer is caused by external factors, such as tobacco, toxins, infectious organisms, an unhealthy diet, and internal factors, such as inherited genetic mutations, hormones, and immune conditions, may act together or in sequence to cause cancer. One of the most important problems in oncology is the immunological compromising due to the ability of cancer cells to thrive in a chronically inflamed microenvironment, evade immune recognition and suppress immune reactivity. In consequence, the chronic inflammation and extreme oxidative stress, will allow an enhancement of genomic instability, DNA damage, epigenetics change, apoptosis evasion, metastasis, etc. Some important functional nutrients with specific antioxidants and polyphenols, together with purified cellular derived peptides and mitochondrial extracts, rich in immunomodulator factors, work on innate or acquired immunity. They stimulate fundamental organs as the thymus, spleen and bone marrow, regulating the transcription, apoptosis, oxidative stress, the activation of dendritic cell, B lymphocytes CD4, CD8, and Natural Killer (NK); as well as the production of its main cytokines (IFN, TNF, IL4, etc.). The purpose of this conference is to address the clinical practical aspects and protocols based on the most relevant scientific studies of integrative biomedical treatments with the best functional nutrients and cellular derived extracts as potent immunomodulators in cancer cases. Besides the increase in conventional treatment techniques and pharmaceuticals, there is also an eminent and continuous need to seek the best and smartest integrative biomedical and nutritional treatment to help prevent and fight cancer.

Biography

Roni Lara Moya completed his Bachelor’s in Biomedicine from University of Mogi das Cruzes, Sao Paulo and a Specialization in Anti-Aging Medicine from Seville University, Spain. He completed Master of Science in Molecular and Cellular Immunology and Biology in University of Coimbra, Portugal and a Master of Science degree in Clinical Advanced Nutrition, University of Barcelona, Spain and PhD in Biomedicine and Immunology, Gulbenkian Institute of Science and Coimbra University. He is a Coordinator of Orthomolecular Medicine of ReGenera Research Group for Aging Intervention. He is a Professor and Director of the Graduation Program in Orthomolecular Therapy, CESPU University, Portugal and Scientific Advisor for Nutraceuticals and Cell Therapy Companies in Europe.

ronimoya@gmail.com

Notes: