

# Cancer Diagnostics Conference & Expo

June 13-15, 2016 Rome, Italy

## The status of medicinal plants and herbal drugs in prevention and treatment of cancer

Majid Asadi-Samani, Mahmoud Rafeian-Kopaei and Hedayatollah Shirzad  
Shahrekord University of Medical Sciences, Iran

Recently, nature based products obtained from organisms such as medicinal plants (secondary metabolites) have been considered a powerful source of adjuvant therapy and prevention of cancer. Many herbal drugs have been produced to treat cancer, such as paclitaxel (Taxol) for breast and ovarian cancers, etoposide for lung and ovarian cancers, and vinblastine and vincristine for Hotchkiss's lymphoma and testicular, lung, and breast cancers. However, searching for the articles, particularly in reliable databases such as Web of Science and PubMed, about the use of medicinal plants to prevent and treat cancer has indicated that despite increased number of experimental studies on anti-cancer effect of herbal drugs and their derivatives, few animal studies and clinical trials have been conducted to date. Indeed, certain reasons, such as the problems of inducing cancer in animals and replicating human disease in animals, physical and mental conditions of people with cancer, the necessity of treating people with cancer as soon as possible, the presuppositions regarding more frequent use of herbal drugs for prevention rather than treatment, and perhaps copyright-related issues regarding the development and production of cancer drugs, have caused few reports on animals and production of the herbal drugs to be found in the databases. However, instead of primary screening, future *in vitro* studies, conducted to detect and discover the medicinal plants and their effective derivatives are needed to investigate the anti-cancer effects of these components in animal models to overcome and eliminate cancer, and then clinical trials take a step to producing herbal drugs.

### Biography

Majid Asadi-Samani is working as a Researcher at the Cellular and Molecular Research Center and the Medical Plants Research Center of Shahrekord University of Medical Sciences. He is the Executive Manager of some reputed international journals and the Manager of Nahalgostar Charmahal Co., which is a science-based company. He is also an Associate Member of Iranian Society of Biology, the Iranian Society of Plant Physiology and the Iranian Medicinal Plants Society. He has published more than 40 scientific papers in peer review international journals and presented his works in more than 10 national and international congresses. He has one patent on regeneration of *Kelussia odoratissima* Mozaff. He has studied the effects of magnetic fields and other environmental factors on germination and enzyme activities of medicinal plants. He is curious to understand how medicinal plants could treat the diseases and help human discover new drugs and he has done some research on their effects on various diseases. Recently, he has focused on the effect of medicinal plants and their derivatives on prevention and treatment of cancer.

[asadi.m@skums.ac.ir](mailto:asadi.m@skums.ac.ir)

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