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Editorial

Galangin and Its Anticancer Effects?

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Abstract

It is known that most of the plant derived compounds were useful in the prevention and/or treatment of cancer. Their anticancer effects results from their antioxidant activity. Galangin, a polyphenolic compound, derived from different medicinal herbs. Different studies were demonstrated its anticancer activity. This review aims to provide a knowledge about anticancer activity of galangin.

Keywords: *Galangin; Cancer*

Galangin (4H-1-benzopyran-4-one,3,5,7-trihydroxy-2-phenyl or 3,5,7-trihydroxyflavone), a polyphenolic compound derived primarily from different medicinal herbs such as *Alpinia officinarum* Hance, *Alnus pendula* Matsum and *Plantago major* L. [1]. It has been long been used as a folk remedy in Asian cultures for the prevention and/or therapy of cough, cold, gastrointestinal diseases, diabetes and diarrhea [2].

There are several studies that showing antiproliferative effects of galangin against leukemia, prostate, breast, cervical and esophageal cancer cells [3-5]. It is shown that galangin caused G0-G1 cell cycle arrest, modulation of Cyclin/cdk expression and increased apoptosis in cells sensitizing and resistant to imatinib-resistant Bcr-Abl [6]. Zhang., *et al*. [7] demonstrated that galangin reduced cell proliferation, cell adhesion, cell propagation and motility in metastatic mouse melanoma cancer cell (B16F10). It is reported that galangin showed its anticancer effects via the activation of caspase 8/t-Bid mitochondrial pathway in hepatocellular carcinoma and modulation of glutathione S transferase (GST) function [8]. Wang and Tang [9] were observed that galangin inhibited laryngeal cancer cell proliferation, related to p38 inactivation by galangin treatment. mTOR activation regulated by PI3K/AKT was reduced by galangin, suppressing cancer cell transcription and proliferation.

In conclusion, we can say that the anticancer effects of galangin can be seen against different cancer types.

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