

7th Global Conference on **CELL AND GENE THERAPY**

July 15-16, 2024 | London, UK

Evaluation of the effectiveness of leaf extract of Myrtus communis on Human Liver Cancer cells.**Majed Abdullah Aslshamlan***King AbdulAziz University, Saudi Arabia*

Myrтус communis has been used medicinally for a very long time. It has a wide range of biological qualities, including anticancer, anti-inflammatory, antioxidant, and antibacterial capabilities. Many parts of Myrtus communis, such as fruit, leaves, and foliage, are frequently employed as food supplements in traditional therapy. The objective of this study was to evaluate the effect of the methanol extract of Myrtus communis against the HepG2 cancer cell line using various methods in vitro. Specifically, the MTT assay was performed to measure cell proliferation under the influence of plant extract. Compared to the control group, the treatment with Myrtus communis extract induced a significant inhibition in the cell viability of HepG2. In addition, apoptosis studies were applied to measure cell apoptosis via flow cytometry. A large amount of apoptosis was observed in HepG2 cancer cells treated with plant extract. Furthermore, the processes causing the suppression of cell proliferation in HepG2 cells were examined using cell cycle analysis. These findings imply that the distribution of cells at various stages of the cell cycle is influenced by the use of Myrtus communis extract. The percentages of cells in the various phases seem to be influenced by the plant extract concentrations, and variable levels of cell growth inhibition have been observed. Collectively, the current study showed that Myrtus communis leaf extract was an effective treatment against the HpG2 human liver cancer cell line. Further studies are required to explore a novel treatment approach for hepatocellular carcinoma.

Biography

Majed Abdullah Aslshamlan is a dedicated researcher at King Abdulaziz University in Saudi Arabia, specializing in cancer biology. This innovative work aims to uncover the potential therapeutic properties of natural compounds in cancer treatment, contributing to the search for alternative and complementary therapies. Majed's commitment to advancing scientific knowledge and improving cancer care underscores his valuable role in the research community.