

Anticancer effects of the medicinal plants *Frangula alnus* and *Rhamnus frangula* on Breast Cancer Cells

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Background

The most common cause of death in the world is cancer due to its prevalence in the world, particularly breast cancer. The aim of this study was to investigate the anticancer effects of the medicinal plants *Frangula alnus* and *Rhamnus frangula* on breast cancer (MCF7) cells

Methods

In this laboratory-experimental study, MCF7 cells were divided into control, and cells exposed to 0.001, 0.01, 0.1, 1 and 10 mg/ml of hydroalcoholic extract of *Frangula alnus* miller and of *Rhamnus frangula*. MTT assay was used to determine cytotoxic effects of the extract. The data were statically analyzed using ANOVA.

Results

The results showed that coadministration of 10 mg/ml of hydroalcoholic extract of *Frangula alnus* and of *Rhamnus frangula* resulted in significant decrease in viability of MCF7 cells in cell culture.

Conclusion

According to our finding, only coadministration of high dose of hydroalcoholic extract of *Frangula alnus* and *Rhamnus frangula* has cytotoxic effects on breast cancer cells in cell culture.