

Study of an extract of *Nerium oleander*, Anvirzel™, in prostate and breast cancer cell lines

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Background: Anvirzel™ is an extract of *Nerium oleander*, which is mainly concluded by Olenadrin and another cardiac glycoside, Oleandrigenin. The literature and experimental data suggest that derivatives of *Nerium oleander* exhibit anticancer properties for several decades. The purpose of the present study is the finding of cytostatic-cytotoxic action in hormone-dependent human commercial cancer cell lines.

Results: The results have showed an anti-cancer activity of Anvirzel™ in both types of tumors. In prostate cancer cell lines, the results were markedly better, while in breast cancer cell lines the T47D cell line presented the best results.

Materials and Methods: Established human cancer cell lines PC3, LNCaP and 22Rv1 representing human prostate cancer and MDA-MB 231, T47D, MCF-7 cell lines, that represent human breast cancer have been studied. The viability assays, MTT (Methyl Tetrazolium Dye), SRB (Sulforhodamine) and CVE (Crystal Violet) assays have been used to find out the efficacy of Anvirzel™ in different incubation times and densities.

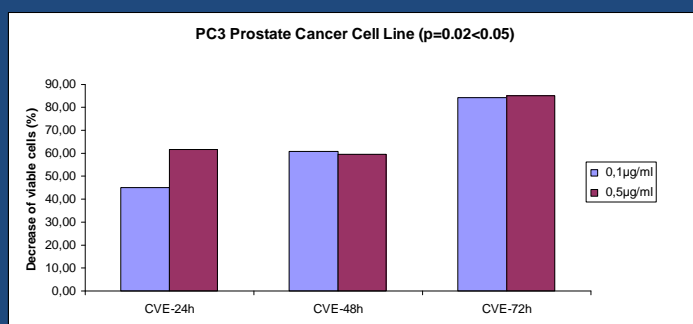


Diagram I: Reduction percentage in PC3 cancer cell line.

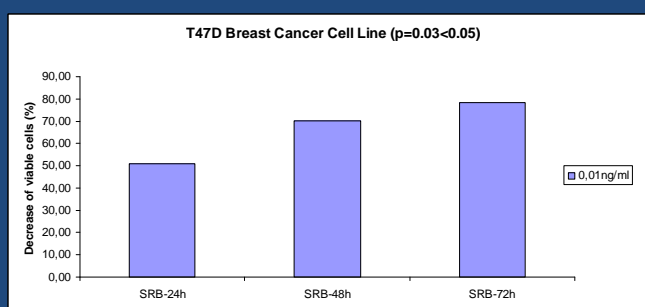


Diagram II: Reduction percentage in T47D cancer cell line.

Conclusions: Anvirzel™ seems to have anticancer properties in prostate and breast cancer. However, it seems more effective in tumors that are a little or no hormone-dependent than in others.

Selected References:

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