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**ABSTRACTS**



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## The influence of phytochemicals on grade IV prostate adenocarcinoma

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Adenocarcinoma is a worldwide concern, being one of the main causes of death in men. (1) Bone metastases derived from this type of cancer, the fact that tumor cells are increasingly resistant to existing oncological drugs and the side effects caused by these are the main causes for the need to develop new therapies. (2) Thus, silymarin and cinnamic acid (CINN) are examples of two phytochemicals that have been studied for the treatment of this pathology, since they have a fundamental role in chemoprevention, that is, they prevent stages of initiation, promotion and progression, associated with carcinogenesis, reducing cancer morbidity and mortality. (3, 4)

The main objective of this project is to evaluate the effect of both phytochemicals on the PC3 cell line of grade IV prostatic adenocarcinoma. Thus, parameters such as viability (MTT) and cell motility (injury) were evaluated through the application of different concentrations of compounds in tumor cells. It was demonstrated, with the results obtained, that both silymarin and CINN have the ability to decrease the viability and motility of prostate cancer cells.

In short, it is possible to state that the phytochemicals in question have an antitumor effect, proving their potential as treatments against the PC3 cell line, through the reduction of cell proliferation and induction of apoptosis.

**Keywords:** Prostate cancer; phytochemicals; viability; motility

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