

The relationship between Cyclophosphamide for the treatment of Prostate Cancer Skeletal Metastasis

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Abstract

Introduction: Cyclophosphamide is used to treat cancers and autoimmune diseases. It is used to quickly control the disease. Because of its toxicity, it is replaced as soon as possible by less toxic drugs. Regular and frequent laboratory evaluations are required to monitor kidney function, avoid drug-induced bladder complications and screening for bone marrow toxicity.

Methods and Results: The statistical population consisted of 75 blocked and paraffinized prostate cancer samples and 60 healthy tissue samples obtained from the Iranian Tissue Bank. RNA was extracted using TRIzol™ precipitation method. Specific sequences were then amplified for both groups by RT-PCR. Afterward, specific regions were cut by RFLP technique.

Results: Based on the results, 65% of the patient samples showed significant relationships with CD82 gene expression ($P = 0.01$, $OR = 0.94$, $CI = 0.61-2.23$). The gene expression also increased with age to a certain degree in the patient group ($P = 0.1$, $OR = 0.82$, $CI = 0.60 - 1.98$).

Conclusion: The expression Cyclophosphamide for the treatment of Prostate Cancer Skeletal Metastasis compared to the control group. This result could indicate that the gene can be used as a biomarker for the identification of people at the risk of prostate cancer.

Keywords: Pembrolizumab, Prostate Cancer, Skeletal Metastasis, PCR