

## عنوان مقاله:

Bioinformatics evaluation of targetom has-miR- 204-5p signaling pathways and related function of Bcl-2 in patients with colorectal cancer

## محل انتشار:

سومین همایش بین المللی زیست شناسی و علوم زمین (سال: 1399)

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## خلاصه مقاله:

Colorectal cancer (CRC) is a disease mainly caused by an adenomatous polyp or adenoma considered a common and deadly disease worldwide. According to reports published by the Ministry of Health, this disease is the third most common cancer in women and the fifth most common in men. Biomarkers can be used for patient assessment in multiple clinical settings. A microRNA (miRNA) is a small single-stranded non-coding RNA molecule (containing about 22 nucleotides) that functions in RNA silencing and post-transcriptional regulation of gene expression. miRNAs function via base-pairing with complementary sequences within mRNA molecules. Introductory studies have revealed how the expression of microRNAs are in relation with abnormalities which are featured of many diseases such as cancer. Tumor advancement, and its feedback to therapy are well documented by microRNA profile alteration, which in turn suggests their potential applicability as predictive, diagnostic, and prognostic biomarkers. According to bioinformatic databases and studies of The Cancer Genome Atlas site, mir-204-5p was selected to study the colorectal cancer, then for finding more information we used NCBI, miRbase, miRWalk2, DAVID database and KEGG pathway. BCL2 (and its antiapoptotic orthologues) seems to inhibit apoptosis by the preservation of mitochondrial membrane integrity. It is also known that BCL2 binds to and inactivates BAX and other pro-apoptotic proteins, thereby inhibiting apoptosis. According to bioinformatics studies, mir-204-5p is predicted to target the BCL2 gene in colon cancer and miR-204-5p Inhibits Proliferation and Invasion and Enhances Chemotherapeutic Sensitivity of Colorectal Cancer Cells by Downregulating BCL2. Finally, our results indicate that the expression of miR-204-5p is predicted to decrease and as a result increase the expression of the target gene in colorectal cancer.

## کلمات کلیدی:

Colorectal cancer, miRNA, bioinformatics, mir- 204-5p, BCL2

## لینک ثابت مقاله در پایگاه سیویلیکا:

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