

## عنوان مقاله:

miR-۳۳۱ is correlated with Breast cancer

## محل انتشار:

چهارمین کنگره بین المللی و شانزدهمین کنگره ملی ژنتیک (سال: 1399)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

**Background and Aim:** Breast cancer is the second most common malignancy overall and the fifth most frequent cause of cancer related death. miRNAs are often discussed in relation to cancers either as oncogenes or their ability to down-regulate tumor suppressor genes. miRNAs, through binding to 3'-UTR of the target mRNAs, leading to mRNA degradation or translational repression. A recent study reported that, miR-۳۳۱ was overexpressed in malignant breast tumors. Further analysis also revealed that the level of miR-۳۳۱ might provide valuable information for the differential diagnosis of benign and malignant breast tumors. miR-۳۳۱-۳p is a member of the miRNA-۳۳۱ family, with a length of around ۲۱ nucleotides and has been found to down-regulate HER-۲ in breast cancer cells. Considering the important role of miR-۳۳۱ in breast cancer pathogenesis and also due to the high prevalence of this cancer in Iran, the aim of this study was to assessment of miR-۳۳۱ expression changes in breast cancer women. **Methods:** Breast tissue samples were prepared from patients (n=۲۰) and healthy control (n=۲۰) groups. The RNA was extracted using Trizol reagent followed by polyA addition to miRNAs and cDNA was synthesized. Design of specific primers, U6 internal control gene and miR-۳۳۱, was performed by using Oligo۷ software. The miR۳۳۱ expression level was evaluated by real time -PCR technique and expression fold-change of the miRNA in patient,s bloods to the healthy people were calculated using  $2^{-\Delta\Delta Ct}$  method. Statistical analysis was performed by SPSS software and graph pad prism. **Results:** The results of this study showed that expression level of miR-۳۳۱-۳p in breast cancer increased in comparison with healthy subjects ( $p < 0.05$ ). **Conclusion:** miR۳۳۱-۳p is an important miRNA playing fundamental roles in metastatic processes, such as cell proliferation, evasion of apoptosis, angiogenesis and EMT. Real time PCR results showed miR۳۳۱-۳p alteration in breast patients. miR-۳۳۱-۳p as a potential promoter in breast cancer metastasis may be used as a biomarker for detection of breast cancer. Although, further studies by larger people are needed to confirm the results.

## کلمات کلیدی:

miR-۳۳۱-۳p, Real-Time PCR, Breast cancer

## لینک ثابت مقاله در پایگاه سیویلیکا:

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