

miCoRe: Colorectal Cancer miRNAs Database

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Abstract : Colorectal cancer (CRC) also refers as bowel cancer or colon cancer. It involves the development of abnormal growth of cells in colon or rectum part of the body. This work leads to the development of a miRNA database in colorectal cancer. We named this database- miCoRe. This database comprises of all validated colon-rectal cancer miRNAs information from various published literature with an effectual knowledge based information retrieval system. miRNAs have been collected from various published literature reports. MySQL is used for main-framework of miCoRe while the front-end was developed in PHP script. The aim of developing miCoRe is to create a comprehensive central repository of colorectal carcinoma miRNAs with all germane information of miRNAs and their target genes. The current version of miCoRe consists of 238 miRNAs which are known to be implicated in malignancy of CRC. Alongside with miRNA information, miCoRe also contains the information related to the target genes of these miRNA. miCoRe furnishes the information about the mechanism of incidence and progression of the disease, which would further help the researchers to look for colorectal specific miRNAs therapies and CRC specific targeted drug designing. Moreover, it will also help in development of biomarkers for the better and early detection of CRC and will help in better clinical management of the disease.

Keywords : colorectal cancer, database, miCoRe, miRNAs

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