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## MicroRNA: A small non-coding RNA, an efficient biomarker for prostate cancer

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Prostate cancer is the second leading cancer for men in America and Europe. Prostate cancer development is a slow process in men commonly over the age of fifty years. There are still poor in tools or biomarkers to identify in its early stage of development. Currently clinicians are using prostate specific antigen testing (PSA) and digital rectal examination (DRE) as early diagnostic tools for identifying prostate cancer but it shows ineffective due to low specificity and poor sensitivity. Therefore a novel biomarker for diagnosis of prostate cancer is required. A large quantity of microRNAs (miRNAs) is built up of 18-23 nucleotide; they are small non-coding and single-stranded and are important in post-transcriptional regulation of gene expression by degrading or suppressing target gene mRNAs. MiRNAs are implicated in the pathogenesis of prostate cancer; however they also act as novel target for the therapeutic intervention and circular microRNAs are shown potential biomarker for the prostate cancer diagnosis and show more specificity and sensitivity compared to available tools/biomarkers.

### Biography

Khanmi Kasomva is currently a PhD scholar at Entomology Research Institute, Loyola College, India. He has completed his Master's degree in Biotechnology in 2014 from Loyola College, India. He is the recipient of 2013 Summer Research Fellowship of Indian Academy of Sciences and recipient of 2016 Young Professional-II from Indian Council of Agriculture Research and also received a Best Diplomacy Award at 1st session of North East Indian International Model United Nation Conference 2013. The main focus of his research is to understand the mechanism of microRNAs in prostate cancer, to examine the gene regulation by microRNA and to determine microRNA as a biomarker in prostate cancer. Recently, he has published a paper in *Clinica Chimica Acta* entitle "MicroRNA in Prostate Cancer".

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