DDPC: <u>Dragon Database of Genes Associated with Prostate Cancer</u>

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Prostate cancer (PC) is one of the most commonly diagnosed diseases and cause of cancer death in men. PC is sometimes difficult to diagnose and treat since it can remain dormant with no clear warning. Prostate-specific antigen has been used as an essential diagnostic tool for over two decades for PC surveillance. Extensive research of PC has led to the availability of a large volume of accumulated data on PC. There are several hundreds of genes that are implicated in different stages of PC that may serve as a basis for developing diagnostic methods or even cures. In order to provide PC researchers with a convenient repository of information of relevance to these PC implicated genes we have developed DDPC (Dragon Database of Genes Associated with Prostate Cancer), an integrated knowledgebase of genes experimentally verified as implicated in PC. DDPC also integrates data on molecular interactions, pathways, gene ontologies, gene regulation at molecular level, predicted transcription factor binding sites and their corresponding transcription factors. DrugBank data on drugs associated with PC have been incorporated into DDPC. Genes incorporated in DDPC have been crossreferenced to richly annotated protein and other molecular databases. We believe this resource will serve as useful information for the identification of potential PC drug receptors and could contribute to rational design of novel drugs for PC. We believe that DDPC is a useful resource that can aid studies towards understanding the molecular mechanisms underlying PC and may contribute to advancing diagnosis and perhaps therapy. DDPC is freely available to academic and non-profit users at http://apps.sanbi.ac.za/ddpc/ or http://cbrc.kaust.edu.sa/ddpc/.