Therapeutic cancer vaccines and novel drug delivery systems

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Cancer is a big question for scientific community as no existing treatments could solve complete problems related to this dreadful disease. Research is in well progress since half century but it failed to give a perfect solution to fight completely against it. However, the developments in science and technology facilitate scientist to develop new methods of treatment. One such milestone treatment for cancer that is giving good hope to the people is cancer vaccines. They stimulate the immune system to be able to recognize cancer cells as abnormal and destroy them. Cancer vaccine research is in progress to develop universal as well as specific cancer vaccines. The therapeutic potential of host-specific and tumor-specific immune responses is well recognized and after many years, active immunotherapies directed at inducing or augmenting these responses is in clinical focus. Anti-tumor immunization is a complex, multi-component task of delivering antigens incorporated in novel drug delivery systems. They are a promising new approach for generating all types of desired cytolytic T lymphocytes, T helper cells and antibodies whilst being a technology that has the potential for global usage in terms of manufacturing ease, broad population administration and safety. Active immunotherapy also explains the immunosuppressive and tolerogenic mechanisms deployed by tumors. This study provides an insight from clinical studies of therapeutic cancer vaccines directed against tumor-associated antigens and discusses their implications for the use of active immunotherapy. The developments in cancer therapy pertaining to vaccine development against cancer are highlighted.

Biography
Gannu Praveen Kumar, Professor and Principal in Sahasra Institute of Pharmaceutical Sciences since April 2014, graduated from H K E’s Society College of Pharmacy, Gulbarga University in 1997, Post graduation from BITS, Pilani in 1999 and PhD from UCPSC, Kakatiya University in 2009. He has published in both national and international journals and compiled few chapters for text books. He received Gem of India award in the year 1999. He is an advisor for few pharmaceutical companies. He visited foreign countries like London, Dubai, Singapore, Malaysia and Spain as invited speaker.

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