

Novel Immuno oncology approaches for cancer therapy

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In spite of significant advances in recent years towards the development of new therapies, cancer is still a largely unmet medical need and the leading cause of death in industrialized countries. The main challenge in cancer therapy is the patients' immune suppression leading to tumor relapse and therapeutic failure. Chemotherapy agents are often accompanied by various side effects and poor pharmacokinetics profile. Advancements in nanoparticles as novel drug carriers are rapidly progressing and offer exciting promises. Polymeric nanoparticles for immuno oncology purposes were developed, characterized and applied to improve the efficacy of the immunotherapy and chemotherapy of cancer. The nanoparticles showed significantly superior efficacy compared to conventional treatments. The drawbacks and challenges of the current cancer treatments and different strategies to overcome the issues will be presented and discussed.

Biography

Azita Haddadi is currently an Associate Professor at the Division of Pharmacy, University of Saskatchewan, Canada. She has received her PharmD in 1997 and PhD in Pharmaceutical Sciences in 2005. She has also completed a 3-year Postdoctoral Fellowship followed by a Research Associate position at the University of Alberta and a Senior Scientist position at the Quest PharmaTech Inc. Her research program focuses on overcoming the ongoing challenges in cancer therapy. The main emphasis of her research is to develop new biomedical and pharmaceutical nanotechnology strategies for cancer chemo-immunotherapy. Her research attracted considerable funding from a number of national organizations in Canada.

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