



Cutting-Edge Cancer Vaccines Enhanced by Nanotechnology

Guest Editor:

Dr. Xiupeng Wang

Health and Medical Research
Institute, National Institute of
Advanced Industrial Science and
Technology (AIST), Central 6, 1-1-
1, Higashi, Tsukuba, Ibaraki 305-
8566, Japan

Deadline for manuscript
submissions:

30 April 2025

Message from the Guest Editor

Cancer immunotherapies have significantly extended the survival time of cancer patients, revolutionized cancer treatment and opened a new era of cancer treatment. In particular, nanotechnology can protect the delivery of antigens, enable sustained and efficient antigen delivery to specific targets, enhance immunogenicity, and induce specific immune responses. Therefore, nanotechnology has played an indispensable role in the success of various clinical and preclinical vaccines.

In this Special Issue, original research articles and reviews related to the recent advances, current challenges and future perspectives in cutting-edge nanotechnology-based cancer vaccines are welcome. Research areas may include the following:

1. Nanoscale synthesis, structural regulation and functional design of polymers, lipids, inorganic particles and bio-derived materials for cancer vaccines;
2. Nano-vaccine adjuvants for therapeutic, prophylactic and in situ cancer vaccines;
3. Nanotechnology-based cancer vaccines combined with other cancer therapies, such as immune checkpoint inhibitors;
4. Mechanisms, safety and efficacy of nanotechnology-enhanced cancer vaccines.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Ralph A. Tripp

Department of Infectious
Diseases, College of Veterinary
Medicine, University of Georgia,
Athens, GA 30602-7387, USA

Message from the Editor-in-Chief

Vaccines (ISSN 2076-393X) has had a 6-year history of publishing peer-reviewed state of the art research that advances the knowledge of immunology in human disease protection. Immunotherapeutics, prophylactic vaccines, immunomodulators, adjuvants and the global differences in regulatory affairs are some of the highlights of the research published that have shaped global health. Our open access policy allows all researchers and interested parties to immediately scrutinize the rigorous evidence our publications have to offer. We are proud to present the work and perspectives of many to contribute to future decisions concerning human health.

Author Benefits

Open Access: free for readers, with **article processing charges (APC)** paid by authors or their institutions.

High Visibility: indexed within **Scopus**, **SCIE (Web of Science)**, **PubMed**, **PMC**, **Embase**, **CAPLus / SciFinder**, and **other databases**.

Journal Rank: JCR - Q1 (*Immunology*) / CiteScore - Q1 (*Pharmacology (medical)*)

Contact Us

Vaccines Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/vaccines
vaccines@mdpi.com