Special Issue

Innovative Strategies to Boost the Immunogenicity of Cancer Vaccines

Message from the Guest Editors

Cancer vaccines hold great promise in immuno-oncology, yet their clinical efficacy has often been limited by the low immunogenicity of tumor antigens and the challenge of immune tolerance. This Special Issue highlights recent advances in developing and optimizing cancer vaccines, including subunit protein, peptide-based, mRNA, and viral vector platforms, to elicit potent and durable anti-tumor immune responses. We welcome contributions on novel antigen design, delivery technologies, and adjuvant systems that enhance antigen uptake, processing, and presentation. Particular emphasis will be placed on strategies that upregulate MHC class I and II expression, expand epitope coverage, and overcome HLA restriction as well as tumor antigen heterogeneity. We also invite studies exploring the combination of cancer vaccines with other modalities, such as immune checkpoint inhibitors, cytokine therapies, adoptive T cell transfer, antibody–drug conjugates (ADCs), and T cell engagers, to synergistically improve therapeutic efficacy. This Special Issue aims to showcase state-of-the-art innovations driving the next generation of cancer vaccines toward meaningful clinical impacts.

Guest Editors

Prof. Dr. Eric O'Neill

Department of Oncology, University of Oxford, Old Road Campus Research Building, Roosevelt Drive, Headington, Oxford OX3 7DQ, UK

Dr. Shisong Jiang

Department of Oncology, University of Oxford, Old Road Campus Research Building, Roosevelt Drive, Headington, Oxford OX3 7DQ, UK

Deadline for manuscript submissions

20 March 2026

Vaccines

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 9.9
Indexed in PubMed

mdpi.com/si/243645

Vaccines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
vaccines@mdpi.com

mdpi.com/journal/vaccines

Vaccines

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 9.9
Indexed in PubMed

mdpi.com/journal/vaccines

About the Journal

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.

Editor-in-Chief

Prof. Dr. Ralph A. Tripp
Department of Infectious Diseases, College of Veterinary Medicine, University of Georgia, Athens, GA 30602-7387, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Medicine, Research and Experimental) / CiteScore - Q1 (Pharmacology (medical))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.6 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).

MDPI