



Advances in DNA Vaccines

Guest Editors:

Dr. Maria G. Isaguliantis

1. Department of Research, Riga Stradins University, LV-1007 Riga, Latvia

2. Department of Microbiology, Tumor and Cell Biology, Karolinska Institutet, Stockholm, Sweden

Dr. Karl Ljungberg

Director of Preclinical Development, Eurocine Vaccines AB, Fogdevreten 2, Karolinska Institutet Science Park, 171 65 Solna, Sweden

Deadline for manuscript submissions:

closed (28 February 2019)

Message from the Guest Editors

DNA is a rapidly developing vaccine platform for cancer, infectious and non-infectious diseases. Plasmids use adjuvants to encode proteins to be further synthesized in vaccine recipients. DNA is mainly synthetic, ensuring enhanced expression. Their introduction into the host induces antibody and cellular responses. The latter are often more pronounced, and mimic the events occurring in infection, especially viral. Processing can be re-routed to the lysosome, or immunogen can be secreted for further presentation in a complex with MHC II. Apart from the expression, the vaccination efficacy depends on DNA delivery. The progress of research aiming at the optimization of DNA vaccine design, delivery, and immunogenic performance have led to a marked increase in their efficacy in large species and man. New DNA vaccines for use in the treatment of infectious diseases, cancer, allergies and autoimmunity are forthcoming. This Special Issue will deal with all aspects of DNA vaccine development.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Ger Rijkers

Department of Health, Cognition
and Behavior, University College
Roosevelt, 4331 CB Middelburg,
The Netherlands

Message from the Editor-in-Chief

Vaccines (ISSN 2076-393X), founded in 2013, now has a firm history of publishing peer-reviewed, state-of-the-art research papers on vaccines and vaccination in the broadest sense. Areas covered include, but are not limited to, novel and emerging vaccine technologies, building on in-depth knowledge of what constitutes a protective immune response. These can be new vaccines for old diseases, or old vaccines for new diseases. Vaccines against cancer and autoimmune diseases explicitly are also within the scope of the journal. Because public opinion and even government policies towards vaccines and vaccination have changed, vaccine policy and public health issues are major concerns. Climate change will also have an impact on the spread of infectious diseases, and thus also on vaccine and vaccination policies worldwide.

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

Contact Us

Vaccines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/vaccines
vaccines@mdpi.com
[X@Vaccines_MDPI](https://twitter.com/Vaccines_MDPI)