







an Open Access Journal by MDPI

Plasmid DNA for Gene Therapy and DNA Vaccine Applications

Guest Editor:

Dr. Urska Kamensek

Department of Experimental Oncology, Institute of Oncology Ljubljana, Zaloska Cesta 2, SI-1000 Ljubljana, Slovenia

Deadline for manuscript submissions:

closed (31 May 2023)

Message from the Guest Editor

Dear Colleagues,

In recent years there has been an increased interest in plasmid DNA as a vector for gene therapies and DNA vaccines against infectious, acquired, and genetic diseases, including cancer and COVID-19. Additionally, plasmids are used for the production of viral particles intended for viral gene and oncolytic therapy. With the recent event of artificial gene synthesis methods, the assembly of new plasmids has become easier than ever. Plasmids can be designed to encode for various therapeutic targets, vaccine antigens, therapeutic antibodies, shRNA molecules, elements of CRSPR/Cas9 systems, viral vector elements, etc. Additionally, expression cassettes can now be easily tweaked and codon-optimized for higher and more targeted expression, and bacterial backbones minimized for more efficient and safer plasmid production. However, there are still some challenges that need to be overcome to achieve the widespread application of plasmid DNA therapeutics.

This Special Issue welcomes research papers dealing with all aspects of gene therapy and DNA vaccine applications of plasmid DNA. Review articles on the related topics are also welcomed













an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Patrick J. Sinko

Department of Pharmaceutics, Ernest Mario School of Pharmacy, Rutgers University, Piscataway, NJ 08854, USA

Message from the Editor-in-Chief

Pharmaceutics (ISSN 1999-4923) is an online open access journal on the science and technology of pharmaceutics and biopharmaceutics. The scientific community, the wider community and the general public have unlimited and free access to the content as soon as a paper is published; this open access to your research ensures your findings are shared with the widest possible audience. Please consider publishing your impressive work in this high quality journal. We would be pleased to welcome you as one of our authors.

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 (*Pharmacology & Pharmacy*) / CiteScore - Q1 (*Pharmaceutical Science*)

Contact Us