







an Open Access Journal by MDPI

Advances in the Development of mRNA Medicines and mRNA Vaccines

Guest Editor:

Prof. Dr. Keiji Itaka

1. Department of Biofunction Research, Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University (TMDU), 2-3-10 Kanda-Surugadai, Tokyo 101-0062, Japan

2. Clinical Biotechnology Team, Center for Infectious Disease Education and Research (CiDER), Osaka University, 1-1 Yamadaoka, Suita, Osaka 565-0871, Japan

Deadline for manuscript submissions:

closed (30 September 2023)

Message from the Guest Editor

Dear Colleagues,

Synthetic mRNA is attracting much attention as a new drug modality, with significant interest in the next applications of mRNA medicines and vaccines. This Special Issue of *Pharmaceutics* will address new ideas for developing mRNA medicines and vaccines, including mRNA design (e.g., modified nucleotides, self-amplified mRNA), delivery systems (e.g., lipid nanoparticle (LNP), polyplex carrier, injection device), refinements to improve safety, and proof-of-concept studies using animal models. Original research papers or review articles on any of these aspects are welcomed in this Special Issue.

Prof. Dr. Keiji Itaka Guest Editor













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