Special Issue

Advances in Vaccine Delivery and Vaccine Administration

Message from the Guest Editors

Vaccination is crucial for preventing infections by providing protection against invading pathogens. Recent advancements in vaccine delivery systems, such as lipid nanoparticles and polymeric nanoparticles, have enabled the efficient delivery of mRNA and vaccine antigens, resulting in enhanced vaccine efficacy. Vaccine delivery systems not only protect the vaccine cargo but also improve the delivery of vaccine antigens to target cells, thus enhancing vaccine-induced immunity. However, further research is needed to fully utilize these delivery systems for all types of vaccine antigens. Moreover, there is a need for improved vaccine administration systems that are more patientfriendly and cost-effective. Developments in vaccine administration strategies, such as microneedle vaccination, oral vaccination, and intranasal vaccination, have made them more patient-friendly, but the production of such vaccines remains challenging.

This Special Issue will spotlight recent advancements in vaccine delivery methods and innovative vaccine administration systems, providing readers with the most up-to-date research findings in the field of vaccine development.

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Deadline for manuscript submissions

closed (30 November 2025)



Pharmaceutics

an Open Access Journal by MDPI

Impact Factor 5.5 CiteScore 10.0 Indexed in PubMed



mdpi.com/si/237991

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Impact Factor 5.5 CiteScore 10.0 Indexed in PubMed



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