Special Issue

Oral Vaccines: Challenges, Immunity and Therapeutic Advances

Message from the Guest Editor

Oral vaccines represent a transformative approach in immunotherapy, offering non-invasive delivery and the unique ability to stimulate both mucosal and systemic immune responses. Oral vaccination is gaining increasing attention as a powerful tool for preventing and treating diseases across various fields, including infectious diseases, cancer immunotherapy, and mucosal immunity. Unlike traditional injectable vaccines, oral vaccines can stimulate both local and systemic immune responses, though their development faces complex scientific challenges. This Special Issue aims to gather cutting-edge research and comprehensive reviews that explore the development, immunological mechanisms, and clinical potential of oral vaccines. Research areas may include the following:

- Mucosal immune mechanisms in oral vaccination
- Oral delivery systems (e.g., nanoparticles, liposomes)
- Probiotic or bacterial vectors for vaccine delivery
- Oral vaccines for infectious diseases
- Oral cancer vaccines and tumor antigen delivery
- Overcoming gastrointestinal barriers in vaccine development
- Immunoadjuvants and mucosal targeting strategies
- Comparative studies of oral vs. parenteral immunization

Guest Editor

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Deadline for manuscript submissions

30 April 2026



an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 9.9
Indexed in PubMed



mdpi.com/si/239740

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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.

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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).

