Special Issue

Computer and Technology Supported Development of Vaccines 2.0

Message from the Guest Editors

The ongoing COVID-19 pandemic has underscored our current ability to develop vaccines quickly. The main aim of this Special Issue is to put forward new knowledge, concepts, and technologies that can be recruited to facilitate vaccine design, including contributions from proteomics, immunology, structural biology, systems biology, and mathematical modeling. In this context, the adoption of modeling and simulation for the development and de-risking of vaccines will be the key to drastically reducing animal and human testing, lowering costs, and shortening marketing times. We particularly welcome research articles and reviews on complete-genome sequencing of pathogens. computational, high-throughput technologies for antigen and epitope discovery, antigen receptor profiling, the modeling of antigen-antigen receptor interactions, and the computational simulation of immune responses. Likewise, contributions utilizing these technologies to develop vaccines and immunotherapeutics to treat cancer, allergies, and autoimmune diseases are also welcome.

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Deadline for manuscript submissions

closed (30 November 2023)



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Impact Factor 3.4
CiteScore 9.9
Indexed in PubMed



mdpi.com/si/126899

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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).

