Special Issue

Immune Response to Dengue Viral Infection

Message from the Guest Editors

Dengue virus (DENV), a mosquito-borne flavivirus, poses a significant global health burden, with over 100 million symptomatic infections annually. The immune response to DENV infection is a double-edged sword: while adaptive immunity can confer long-term serotype-specific protection, cross-reactive antibodies and T-cells may exacerbate disease severity during secondary heterotypic infections. This Special Issue explores advances in molecular immunology, vaccine design, and therapeutic strategies targeting host immune pathways. Topics also include cross-protective immunity, the role of pre-existing immunity to related flaviviruses (e.g., Zika), and innovative biomarkers for predicting disease progression. Contributions addressing gaps in diagnostics, vaccine efficacy, and immunomodulatory therapies are encouraged to inform global dengue control efforts. Research areas may include (but are not limited to) the following:

- Dengue virus infection
- Immune response
- Antibody-dependent enhancement (ADE)
- Cross-reactive immunity
- Viral pathogenesis
- Cytokine storm
- Neutralizing antibodies
- T-cell response
- Vaccine development
- Dengue serotypes
- Host–pathogen interactions

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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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JCR - Q2 (Medicine, Research and Experimental) / CiteScore - Q1 (Pharmacology (medical))

Rapid Publication:

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).

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