

## Special Issue

# Research Progress of New Tuberculosis Vaccines and Vaccine Design

### Message from the Guest Editors

Tuberculosis (TB) is an infectious disease caused by *Mycobacterium tuberculosis* infection, and still a global public health problem. Mtb infection can arouse host innate and adaptive immune responses when entering the body. Innate immunity has an important role against Mtb infection. Airway epithelial cells, macrophages, neutrophils, dendritic cells (DCs), natural killer cells (NK), and mast cells, among others, are the major components of innate immunity. (1) Novel discovery of candidate protective antigens of *M. tuberculosis*; (2) The mechanism of the interaction between *M. tuberculosis* and the host; (3) The screening, identification, and validation of immunodominant epitopes of *M. tuberculosis* *in silico*, *vivo*, or *vitro*; (4) The construction and validation of multi-epitope vaccines for TB prevention; (5) New bioinformatics or immunoinformatic tools for TB vaccine development; (6) The trained immunity induced by the BCG vaccine and its potential roles on COVID-19 prevention; (7) The development of animal models used in TB vaccine evaluation.

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### Guest Editors

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### Deadline for manuscript submissions

closed (31 May 2025)



## Vaccines

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## About the Journal

### Message from the Editor-in-Chief

*Vaccines* (ISSN 2076-393X), founded in 2013, now has a firm history of publishing peer-reviewed, state-of-the-art research papers on vaccines and vaccination in the broadest sense. Areas covered include, but are not limited to, novel and emerging vaccine technologies, building on in-depth knowledge of what constitutes a protective immune response. These can be new vaccines for old diseases, or old vaccines for new diseases. Vaccines against cancer and autoimmune diseases explicitly are also within the scope of the journal. Because public opinion and even government policies towards vaccines and vaccination have changed, vaccine policy and public health issues are major concerns. Climate change will also have an impact on the spread of infectious diseases, and thus also on vaccine and vaccination policies worldwide.

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### Editor-in-Chief

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