



## Research Progress of New Tuberculosis Vaccines and Vaccine Design

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### 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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## Editor-in-Chief

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## Message from the Editor-in-Chief

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