



# Human Immune Responses to Vaccines against Infectious Diseases



It is well-known that vaccination is the most effective method to control infectious diseases. The adaptive immune response induced by vaccination or infection (cured or asymptomatic infection) is a critical arm of human defense against infection by pathogens, and there are significant different responses induced by various types of vaccines, routes, and timing of vaccination. The adaptive immune system plays an important role involved in both pathogen clearance and disease outcome. The adaptive immune system involves B cells, responsible of antigen-specific immunoglobulins production directed against the pathogen, supported by neutralizing antibodies. The generation of memory B cells and long-lived plasma cells is crucial to the long-term effectiveness of vaccines, associated with the long-term persistence of antigen-specific antibodies. Understanding the pattern of adaptive immune responses elicited by vaccines is important for fighting infectious diseases. However, the limited number of clinical trials of vaccination and the reduced cohort of participants for individual study still requires further investigation by international researchers.

Guest Editor

**Dr. Fabio Fiorino**  
LUM University  
"Giuseppe Degennaro",  
Italy; University of  
Siena, Italy  
Fiorino4@unisi.it

In this special issue, all article types are welcome including original research articles, review articles, clinical trials, case reports, commentaries, correspondence articles, short reports, etc. The following sub-topics will be included but is not limited to:

Innovative tools of vaccination against infectious disease;  
Factors modulating the quality, magnitude and durability of vaccine efficacy;  
Biomarkers of humoral or cellular immune responses correlating with protection against infectious disease;  
Comparative studies of vaccination influencing the immune responses;  
Novel methods and data analysis techniques for detection of immune responses;  
Immunological Aspects of Vaccine Safety

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