Special Issue

Human Cytomegalovirus Vaccine Development: Progress and Prospects

Message from the Guest Editor

Human cytomegalovirus (HCMV) is classified as a beta herpesvirus that undergoes latency, is ubiquitous in the general population, and can cause life-threatening disease in individuals who have a dysfunctional immune system. Most babies around the world with congenital HCMV disease are born to women who were seropositive prior to conception. Clinically, there are a number of antiviral medications used to treat acute HCMV disease. However, during pregnancy and under conditions of immune suppression, antivirals are not the standard of care. Therefore, the development of novel vaccines to prevent HCMV infections is vital, particularly in specific patient populations such as pregnant people, especially adolescent girls less than 20 years of age who are at risk of primary infection, the elderly, and those with compromised immune systems. Safe and effective vaccines for HCMV has been elusive; however, recent innovations in mRNA technologies and proteomics have advanced the field.

Guest Editor

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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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