



vaccines



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Advances in Antibody Based HIV-1 Vaccine Development

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Deadline for manuscript
submissions:

closed (31 January 2022)

Message from the Guest Editors

Dear Colleagues,

Intensive collaborative work in the last decade resulted in the isolation of antibodies from a subset of HIV-positive patients, that can potentially neutralize a broad spectrum of primary HIV-1 isolates in vitro and protect from infection in animal models, advancing these broadly neutralizing antibodies (bnAbs) to clinical trials in recent years. In parallel, detailed structural characterizations of bnAbs in complex with HIV-1 envelope proteins (Env) gave insights into particular features of these antibodies and their epitopes. Unfortunately, HIV-1 Env immunogens derived from this knowledge were not able to date to induce bnAbs upon vaccination of humans or non-human primates. However, they can do so in certain species like camelids or cows, which naturally generate antibodies with special characteristics of bnAbs. Detailed immunological studies are being performed to understand the generation of bnAbs in patients with the aim to recapitulate the underlying mechanisms in vaccination approaches.



mdpi.com/si/68119

Special Issue



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Editor-in-Chief

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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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