



Advances in Cancer Immunotherapy and Vaccines Research: 2nd Edition

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Message from the Guest Editor

Immunotherapy is now a standard therapy in addition to surgery, chemotherapy, and radiotherapy for treating cancer. Immune checkpoint blockades are a form of immunotherapy that have acceptable results in many types of tumors. However, it only works for around 20% of patients, as it depends on the immune cells already present in the tumor microenvironment. If these cells are lacking or exhausted, the treatment is not effective. Tumor vaccines can help by increasing the number of antitumor immune cells, including CD8 T cells and CD4 T cells. Peptide epitopes from tumor-associated antigens (TAAs) can be used to develop a tumor vaccine. In the past, vaccines using tumor-derived peptides and inadequate adjuvants (such as incomplete Freund's adjuvant) failed to achieve clinical antitumor effects. However, with improvements in our understanding of the immune system, we can now use peptides, costimulatory molecules, and cytokines in combination with adequate adjuvants to expand T cells and impede the immune-suppressive environment. This Special Issue will gather the latest advances in the field of tumor immunology to optimize tumor vaccines.





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Message from the Editor-in-Chief

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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