

Special Issue

Advances in Plant Genetic Engineered Vaccines

Message from the Guest Editor

Several hurdles can limit vaccination, including a lack of knowledge about vaccinations, unreasonable fears about vaccine safety, a lack of transportation, cost, and the need for a cold chain and logistics of scheduling trained medical personnel for administration. Plant-produced vaccines have the potential to alleviate many of these hurdles. Plant-derived vaccines are produced by recombinant technology, in which the gene encoding the desired antigen protein is integrated into the plant genome.

This Special Issue focuses on **plant systems that can be used to improve vaccinations**. Plants can serve as factories for producing biopharmaceuticals and vaccines. The advantages of plant-based production platforms include easy scale-up, cost-effectiveness, and high safety, as plants are not hosts for human and animal pathogens. The objective of this issue is to highlight the **advantages and progress toward commercialization in various systems and discuss vaccination approaches**.

Keywords:

plant-produced vaccines

oral delivery

mucosal immunity

virus-like particles

Deadline for manuscript submissions

closed (30 April 2026)



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About the Journal

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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CiteScore - Q1 (Pharmacology (medical))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.1 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).