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Novel Insights and Advances in Aquatic Vaccines

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Deadline for manuscript submissions: **12 July 2025**

Message from the Guest Editors

Vaccination is one of the most effective methods to control infectious diseases in aquaculture. Aquatic vaccines have shown potential beneficial effects on human health by overcoming negative effects due to the abuse of pharmaceuticals and antibiotics, as well as their residues in food and the environment. In recent decades, scientific and technological advances have paved newer paths in both basic and applied research areas of aquatic vaccines. Efforts in new technologies, approaches and strategies have been devoted to developing and designing novel aquatic vaccines with a higher quality and efficiency. Reverse vaccinology and structural vaccinology were also employed to screen stronger antigens and develop immunomics-based and computer-aided vaccines. Genetic engineering recombinant and chemical methods were applied to design adjuvant vaccines, polyvalent and combination vaccines, nanoparticle-based vaccines/ nanovaccines and targeted vaccines. Moreover, novel insights also have been proposed to reveal the immunoprotective mechanism of aquatic vaccines and enrich the knowledge of immune response mechanism including mucosal and systemic immunity in aquatic species.

Specialsue



mdpi.com/si/178848





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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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