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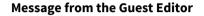
The Use of Nanoparticles in Vaccine Development

Guest Editor:

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Vaccines have been a cornerstone of public health, successfully controlling and eradicating infectious diseases around the world. However, despite their effectiveness, certain challenges persist, including weak immunogenicity, in vivo instability, toxicity concerns, and the need for multiple administrations. Recent advancements in nanotechnology offer potential solutions to address these limitations and revolutionize vaccine development.

Potential topics for this Special Issue may include, but are not limited to, the following:

- 1. The design and engineering of nanoparticle-based vaccine delivery systems;
- 2. Immune responses elicited by nanoparticle vaccines;
- 3. Novel adjuvants and formulations using nanoparticles;
- 4. The biocompatibility and safety assessment of nanoparticle vaccines;
- 5. Nanoparticles used for targeted vaccine delivery and enhanced antigen presentation;
- 6. The stability and storage of nanoparticle-based vaccines;
- 7. Clinical trials and translational studies of nanoparticle vaccines;
- 8. The comparative analysis of nanoparticle vaccines with conventional vaccine approaches;
- 9. Nanoparticles in the development of vaccines against emerging infectious diseases.





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