

Special Issue

Nanoparticles in Medicine: The Potential of “Empty” Nanoparticles and Future Challenges

Message from the Guest Editors

Particles with diameters of 100 nanometers or less are generally classified as nanoparticles. Among them, lipid-based nanoparticles have been widely used in drug delivery applications. A substantial body of research documents their effectiveness, highlighting their ability to encapsulate therapeutic agents within their core or associate them with the particle surface. However, the therapeutic use of empty nanoparticles—those devoid of active encapsulated agents—is emerging as a novel and versatile approach in medical intervention. In this Special Issue, the biophysical and rheological properties of nanoparticles that have been discovered to date will be revealed. The wide range of demonstrated or potentially beneficial effects of empty nanoparticles in the treatment of shock as infection or severe blood loss, the prevention of ischemia reperfusion injury, anticoagulation, reanimation after clinical death, the gene expression of brain stem cells, the gene expression of macrophages, the absorption of toxic mediators, the treatment of lethal infection, and the treatment of pneumonia, among other areas, will be shown. Future research directions and challenges will also be discussed.

Guest Editors

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Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

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