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Potentialities and Challenges of Bio-Inspired Delivery Systems

Guest Editors:

Message from the Guest Editors

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Deadline for manuscript submissions: closed (20 October 2023) Recent advances in drug delivery and nanomedicine allowed for the generation of carriers with intrinsic biologic properties to increase their bio-compatibility, immune tolerance and targeting of sick tissues. Biomimetic delivery platforms can be generated from basically any kind of cellular phenotype recapitulating the surface properties and the biological identity of the cell source. Erythrocyte ghosts, leukosomes, and platelet-derived particles represent only a few examples of these technologies. This class of carriers pairs with new discoveries in the generation of exosomes and cellular vesicles that can be loaded with different kinds of payloads and were recently tested in clinics. This Special Issue aims at collecting original works and reviews dedicated to complex biological carriers, including the work necessary to synthesize, purify and characterize them as well as their application and potential side effects (i.e., immunological response) in the medical field.



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Message from the Editor-in-Chief

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