



biomedicines



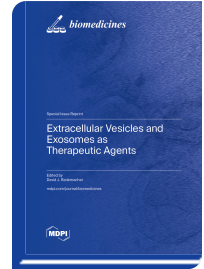
Special Issue Reprint

Extracellular Vesicles and Exosomes as Therapeutic Agents

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This reprint aims to evaluate the therapeutic potential of extracellular vesicles (EVs) and exosomes (EXs), with an emphasis on recent developments in their engineering and medical applications. Genetic engineering and chemical modifications of EXs, combinatorial methods—such as hybrid nanoparticles—large-scale EX production, and the potential of EXs derived from plants and milk as drug delivery vehicles comprise recent advancements in therapeutic applications. The research presented in this reprint examines the antimicrobial properties, regenerative potential in spinal cord injuries, and maternal–fetal communication functions of EXs. The literature highlights the dual role of EXs in Parkinson’s disease, acting as both mediators of disease progression and potential therapeutic agents. Additional research examines the effects of EXs induced by exercise, the effectiveness of EXs derived from plants in the treatment of cancer, and the application of lyophilized EXs for recovery from brain injuries. As therapeutic agents, EVs and EXs are gaining popularity. This reprint highlights the need for continued research to maximize their production and use in clinical settings.



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