Special Issue

Role of Placenta-Derived Mesenchymal Stem Cells in Human Health and Disease

Message from the Guest Editor

The placenta is a temporary organ that regulates the exchange of nutrients, metabolites, gases, antibodies, and all that is required to establish the environment where a fetus can develop until birth. Several cell types of maternal and fetal origins contribute to accomplishing these functions. At full term, the placenta is usually discarded but it represents an abundant source of mesenchymal stromal cells (MSCs) and thus could provide cell precursors for cell therapy. In addition to their self-renewal ability, immunomodulatory properties, and plasticity, placenta-derived MSCs are neither teratogenic nor liable of ethical limitations. As compared to MSCs derived from bone marrow and from other tissues, placenta-derived MSCs remain under-investigated. Given the development of tissue engineering, cellular therapies and artificial organs, there will be an increasing need for cells endowed with plasticity and trophic properties. This Special Issue aims to collect reviews and research papers describing the functional properties and the potential of MSCs and any other aspect that may help to take advantage of this precious resource for regenerative therapies.

Guest Editor

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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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