Special Issue

Dental Pulp Stem Cells (DPSCs) and Tissue Regeneration: Mechanisms Mediated by Direct, Paracrine or Autocrine Effects

Message from the Guest Editors

A new source of mesenchymal stem cells, the so-called dental-pulp-derived stem cells (DPSCs), could represent an important tool for regenerative medicine. DPSCs have also been shown to influence the angiogenesis process, for example through the release of secretory factors or by differentiating into vascular and/or perivascular cells. Given their differentiation and trans-differentiation ability towards specialized cells, when properly implanted into a microenvironment they can also be involved in the regeneration and repair of tissue damaged by traumas, degenerative diseases and pathogens. The second and maybe even more important property that could expand the horizon of regenerative medicine is related to DPSCs' immuno-modulatory functions. As matter of fact, this Special Issue aim to focus on the underlying mechanism of the regenerative potential of DPSCs that could be obtained by: (1) injured tissue substitution by differentiated DPSCs and/or (2) the de novo regeneration capability of endogenous stem cells induced by stem niche remodeling mediated by DPSCs secreted factors.

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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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