Special Issue

Induced Pluripotent Stem and Extracellular Vesicles in Biomedicine

Message from the Guest Editors

Induced pluripotent stem (iPS) cells are promising cell resources for tissue regeneration due to high self-renewal and pluripotency and fewer ethical issues than embryonic stem cells. iPS cells provide new methods for studying stemness and the differentiation process in tissue development. Therefore, having the same features as embryonic stem cells, iPS cells can differentiate into all adult cell lines, providing a new model for studying patient-specific diseases and offering innovative regenerative and translational medicine approaches.

However, despite the advantages of iPS cells, there are important limitations related to cell therapies, including immunogenicity. For this reason, research is currently focusing on studying vesicular products of stem cell secretomes, such as extracellular vesicles (EVs), as potential therapeutics that bypass the problems related to cell therapies. The study of EVs improves epigenetics knowledge to understand intercellular communication and the extracellular environment and can represent new approaches for cell-free therapies.

Authors are invited to contribute original research articles and reviews to this Special Issue.

Guest Editors

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Message from the Editor-in-Chief

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