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Biofunctionalized Scaffold in Regenerative Medicine

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Message from the Guest Editors

The use of a biofunctionalized scaffold with cells and/or soluble factors has emerged as a promising approach in the field of regenerative medicine. A biomaterial refers to a matrix that provides a specific environment and support growth and development. An ideal scaffold must be biocompatible and non-toxic, and should improve cell viability, cell adhesion, and proliferation. Different scaffolds can be combined with cells, such as mesenchymal stem cells (MSCs) that can promote bone regeneration through the differentiation towards the osteogenic lineage or the release of specific soluble factors, or scaffolds can be primed with soluble molecules, including growth factors that can be delivered in the environment, performing a therapeutic action. The aim of this Special Issue is to give an overview of ongoing scientific research to better understand the molecular mechanisms involved in tissue regeneration and the evaluation of the aptitude of biofunctionalized scaffold for future clinical applications.













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Message from the Editor-in-Chief

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