## Special Issue

## Biomedical Applications of Mesenchymal Stem Cells

## Message from the Guest Editors

Mesenchymal stem cells (MSCs) are characterized by their multipotent differentiation ability. In fact, they can give rise to endodermal and ectodermal cells other than those of the mesodermal variety. Moreover, they have antioxidant and anti-inflammatory properties. For these reasons, MSCs can be suitable for cell-based therapeutic strategies, especially in molecular pathologies where pharmacological treatments produce poor results. The molecular mechanisms of MSC-induced beneficial effects include neurogenesis, osteogenesis, chondrogenesis, and angiogenesis stimulation, as well as immunomodulatory, antiinflammatory, and antiapoptotic actions. Moreover, the paracrine release of growth factors and cytokines, mainly delivered at damaged regions, may help to restore tissue homeostasis. This Special Issue entitled "Biomedical Applications of Mesenchymal Stem Cells" focuses on the role of MSCs in damaged tissue repair and its molecular regulatory mechanism. We welcome submissions of original papers and reviews based on results from molecular viewpoints.

## **Guest Editors**

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## Deadline for manuscript submissions

30 December 2025



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## Message from the Editor-in-Chief

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### **Editor-in-Chief**

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