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## Multifaceted Roles of Mesenchymal Stem Cells in Health and Disease

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submissions:

**closed (15 January 2025)**

### Message from the Guest Editors

The worldwide increase in the prevalence of obesity has raised the demand for new therapeutic strategies targeting the related chronic metabolic complications. Among different treatment options for obesity, mesenchymal stem cell (MSC) therapy attracts the most attention. The unique features of MSCs, including immunosuppressive and immunomodulatory properties, make them an ideal candidate for clinical applications. Numerous data have shown that MSCs can improve pancreatic islet cell viability and function, ameliorate hyperglycemia, improve insulin sensitivity, restore liver function, counteract dyslipidemia, lower pro-inflammatory cytokines, and reduce oxidative stress.

This Special Issue aims to provide a comprehensive overview of the therapeutic potential of mesenchymal stem cells (MSCs) in the treatment of obesity-related metabolic complications such as type 2 diabetes mellitus (T2DM), insulin resistance (IR), hepatic steatosis, hepatic fibrosis, infertility, vascular disorders or systemic inflammation. Authors are invited to submit original articles, review articles or meta-analyses/systematic reviews with new insights into MSC-based therapy



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*Cells* has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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