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Altri autori (Persone)	HayatM. A. <1940->
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Prelims -- I Mesenchymal stem cells -- Mesenchymal stem cells in bone regeneration -- Experimental (preclinical) studies and clinical trials of adipose tissue-derived mesenchymal stem cells for Autoimmune diseases -- Validity of markers for epithelial cells and mesenchymal Cells -- Mesenchymal stem cell survival in infarcted myocardium: adhesion and anti-death signals -- Hepatogenic differentiation: comparison between adipose tissue -derived stem cells and bone marrow mesenchymal stem cells -- Fibrin for encapsulation of human mesenchymal stem cells for chondrogenic differentiation -- Differences between adipose tissue-derived mesenchymal stem cells and bone marrow-derived mesenchymal stem cells as regulators of the immune response -- Transforming growth factor-beta induced chondrogenic differentiation of bone marrow-derived mesenchymal stem cells: role of smad signaling pathways -- II Induced pluripotent stem cells -- Drug discovery using human ipsc based disease models and functional hepatic cells -- Generation of antigen-specific t

lymphocytes from induced pluripotent stem cells for adoptive immunotherapy -- III Neural cells and neural stem cells -- Genetic identification of human embryonic stem cell-derived neural cell types using bacterial artificial chromosomes -- Moderate low temperature preserves the stemness of neural stem cells (methods) -- IV Role of stem cells in disease -- High-dose chemotherapy with autologous stem cell support in the treatment of transformed b-cell non-hodgkin's lymphomas -- The wnt/-catenin pathway as a potential target for drug Resistant leukemic stem cells -- Bone marrow stem cell therapies for diabetes mellitus and its complications -- Thyroid cancer stem cells – strategies for therapeutic targeting.- Role of cancer stem cell in mammary carcinogenesis and its clinical implication -- Critical analysis of parkinson's disease models and cell-based therapy -- Presence of an early lineage stem cell phenotype in meningioma-initiatingcells -- Isolation and characterization of cancer stem cells from dog glioblastoma -- Role of stem cell niche in the development of bone metastases (an update) -- Treatment of hemophilia a using b cell-directed protein delivery.-V Stem cell transplantation -- Reduction in the risk invasive fungal infection relapse in patients undergoing allogenic stem cell transplantation using caspofunginas secondary prophylaxis -- Hematopoietic stem cell transplantation in elderly patients with myelodisplastic syndrome and acute myelogenous leukemia: use of busulfan/fludarabine for conditioning -- Co-transplantation of islets with mesenchymal stem cells improves islet revascularization and reversal of hyperglycemia -- Significance of interleukin -7 receptor alpha polymorphisms in allogeneic stem cell transplantation -- Index.

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#### Sommario/riassunto

Presenting contributions by 66 experts representing 13 countries, Volume 10 of the series Stem Cells and Cancer Stem Cells synthesizes current understanding of the causes, diagnosis, and therapy of major human diseases and debilitating tissue and organ injuries, using cell-based treatment. This volume presents contemporary research into generation, preservation, and uses of stem cells in fighting disease and tissue/organ injuries. The contents of the volume are organized into five sections. Mesenchymal Stem Cells section includes chapters on the use of stem cells in bone regeneration, studies and trials of stem cells in autoimmune diseases, and differences between adipose tissue-derived mesenchymal stem cells and bone marrow-derived mesenchymal stem cells as regulators of immune response. Induced Pluripotent Stem Cells section offers chapters on drug discovery using human IPSC-based disease models, and on generation of antigen-specific lymphocytes from IPSCs. Neural Cells and Neural Stem Cells section discusses use of bacterial artificial chromosomes in the genetic identification of stem cell-derived neural cell types, and use of moderate low temperature to preserve the stemness of neural stem cells. The section, Role of Stem Cells in Disease, discusses stem cell support in high-dose chemotherapy of Non-Hodgkin's Lymphomas; potential targets for drug resistant leukemic stem cells, bone marrow stem cell therapies for diabetes mellitus. This section also discusses the use of stem cells in treating thyroid, breast and bone cancers, hemophilia and Parkinson's Disease. The section, Stem Cell Transplantation, includes chapters on reducing fungal infection in allogenic stem cell transplantation patients, use of Bulsufan/Fludarabine for conditioning in haematopoietic stem cell transplantation, and interleukin-7 receptor alpha polymorphisms in allogeneic stem cell transplantation. The editor, M.A. Hayat, is a Distinguished Professor in the Department of Biological Sciences at Kean University, Union, New Jersey, USA.

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