1. Record Nr. UNINA9910298316203321

Titolo	Adult and Pluripotent Stem Cells : Potential for Regenerative Medicine of the Cardiovascular System / / edited by Jürgen Hescheler, Erhard Hofer
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2014
ISBN	94-017-8657-7
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (174 p.)
Disciplina	610.28
Soggetti	Medicine Biotechnology Cytology Stem cells Regenerative medicine Tissue engineering Cardiology Biomedicine, general Cell Biology Stem Cells Regenerative Medicine/Tissue Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	General Introduction -- The Infarct Cell Therapy (INELPY) consortium -- Mesenchymal stem cells for cardiac repair: preclinical models of disease -- Resident cardiac progenitor cells -- Endothelial progenitor cells derived from cord or peripheral blood and their potential for regenerative therapies -- Adipose-derived stromal/stem cells and their differentiation potential into the endothelial lineage -- Cardiac cell replacement therapy with pluripotent stem cell-derived cardiomyocytes -- Biomaterials for cardiac tissue engineering and regeneration -- Cell therapy of acute myocardial infarction and ischemic cardiomyopathy: from experimental findings to clinical trials -- Clinical gene and stem cell therapy in patients with acute and chronic myocardial ischemia --

Index.

Sommario/riassunto

There is hardly an area of research developing so quickly and raising so many promises as stem cell research. Adult, embryonic and recently available induced pluripotent stem cells not only foster our understanding of differentiation of endo-, ecto- and mesodermal lineages to all organs of the body, but foremost nourish the hope that cells grown in culture can be used for regeneration of diseased organs such as the heart damaged by myocardial infarction. This book focuses on perspectives of stem cells for regenerative therapy of cardiovascular diseases. Based on the EC consortium INELPY, it reviews the field and disseminates major outcomes of this project. Thus it introduces the reader to this fascinating area of research and incorporates very recent findings interesting to the expert, spanning the field from bench to bedside. The compilation of contributions is unique as there is yet no similar comprehensive overview combining stem cell research with preclinical and clinical evaluation as well as engineering of tissue patches for transplantation. As such it will be an invaluable source of information for all researchers in the stem cell and tissue regeneration field including bioengineers as well as for all clinicians interested in regenerative therapies, especially for ischemic cardiomyopathies.