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Nota di contenuto	Frontmatter -- Preface -- Contents -- Contributing authors -- List of abbreviations -- 1. Human pluripotent stem-cell-derived vascular cells: in vitro model for angiogenesis and drug discovery / Gopu, Sriram / Tong, Cao -- 2. Role of small molecules in the cardiac differentiation of mesenchymal stem cells / Khan, Irfan / Naeem, Nadia / Ali, Anwar / Salim, Asmat -- 3. MicroRNAs as modulators of endothelial differentiation of stem cells: role in vascular regenerative medicine / Gündüz, Dursun / Aslam, Muhammad -- 4. Cells for the repair of damaged skin and cartilage / Riazuddin, Sheikh / Mehmood, Azra / Latief, Noreen / Tarar, Moazzam Nazeer -- 5. The skeletal muscle stem cells: biology and use in regenerative medicine / Alsharidah, Mansour Saleh / Haider, Khawaja Husnain / Abdalla, Elmuataz Elmansi / Mohammed, Salman Afroze Azmi -- 6. Nanoparticle-based genetic engineering of mesenchymal stem cells / Guo, Changfa / Zhu, Kai / Haider, Khawaja Husnain -- 7. Neural stem cells in regenerative medicine / Hosseini, Seyed Mojtaba / Ziaee, Seyyed Mohyeddin / Tabeshmehr, Parisa -- 8. "Paracrine" the heart with stem cells / Lei, Ye / Haider, Khawaja Husnain -- Index
Sommario/riassunto	Stem cell based therapy is a 21st century approach of therapeutic intervention which epitomizes a shift from conventional symptomatic treatment strategy to addressing the root cause of the disease process. This is especially a hope for the patients suffering from diseases such

as Alzheimer, diabetes, myocardial infarction and other diseases which have always been considered as incurable. Moreover, stem cells provide excellent in vitro disease models for drug development. This book is a compilation of the bench experience of experts from various research labs involved in the cutting edge area of research, describing the use of stem cells both as part of the combinatorial therapeutic intervention approach and as tools (disease model) during drug development.
