

1. Record Nr.	UNINA9910298353803321
Titolo	Perinatal Stem Cells // edited by Anthony Atala, Sean V. Murphy
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2014
ISBN	1-4939-1118-X
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (374 p.)
Disciplina	616/.02774
Soggetti	Stem cells Cytology Reproductive health Obstetrics Stem Cells Cell Biology Reproductive Medicine Obstetrics/Perinatology/Midwifery
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 and index.
Nota di contenuto	1 Amniotic Fluid Stem Cells for Cardiac Regeneration -- 2 Amniotic Fluid Stem Cells for Wound Healing -- 3 Treatment of Necrotising Enterocolitis (NEC) with Amniotic Fluid Stem Cells -- 4 Therapeutic Application of Amniotic Fluid Stem Cells for Graft-versus-Host Disease -- 5 Amniotic Fluid Stem Cell Features Supporting their Putative Role in Fetal Cell Microchimerism -- 6 Amniotic Fluid Stem Cell Therapy for Lung Disease -- 7 Direct Reprogramming of Amniotic Cells into Endothelial Cells -- 8 Amniotic Fluid Stem Cells for the Treatment of Articular Cartilage Defects -- 9 Amniotic Fluid-Derived Cells: An Autologous Cell Source for Cardiovascular Tissue Engineering -- 10 Amniotic Fluid Stem Cells for Bone Tissue Engineering -- 11 Amniotic Fluid Stem Cells for the Repair of Prenatal and Perinatal Defects -- 12 Stimulation of Therapeutic Angiogenesis Using Amniotic Fluid Stem Cells -- 13 Placental Stem/Progenitor Cells: Isolation and Characterization -- 14 Treatment of Liver Disease using Placental Stem Cells: Feasibility of Placental Stem Cells in Liver Diseases: Potential Implication of New Cell Therapy-Based Strategies for Hepatic Diseases

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Sommario/riassunto

This comprehensive volume is one of the first books to offer the reader detailed insight into sources of perinatal stem cells, their biology, and their potential for disease treatment. It examines the research and therapeutic applications of perinatal stem cells including the treatment of renal disease, hematopoietic regeneration, cardiac disease, inflammatory disease, bone regeneration, pulmonary disease, and the treatment of spinal cord injury. Further, the book discusses current progress in the manufacturing, banking and clinical translation of perinatal stem cells. Through this book, readers will gain a thorough understanding of the current pre-clinical and clinical applications of perinatal stem cells as well as the efforts to support the transition of perinatal stem cell therapies from laboratories to clinics. Perinatal Stem Cells contains thirty-two chapters written by internationally recognized leaders in stem cell research. It is organized into four sections covering amniotic fluid stem cells, placental and placental membrane stem cells, umbilical cord stem cells, and clinical translation. This cohesive structure provides an effective framework for detailed insight into this new frontier. Edited by Dr. Anthony Atala, one of the foremost experts in the field, and his co-editor Dr. Sean V. Murphy, this volume is a definitive work for stem cell research and its future implications. It is a key resource for all stem cell researchers, clinicians, and government and industry staff working in this dynamic and exciting field.
