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| Nota di contenuto | Preface -- 1.Functional Dualism of Perinatal Stem Cells -- 2. Immunomodulatory Properties of Perinatal Tissue-Derived Stem Cells -- 3.Umbilical Cord Tissue and Wharton's Jelly Mesenchymal Stem Cells Properties and Therapeutic Potential -- 4.Perinatal Tissues-Derived Endothelial Progenitor Cells -- 5.Human Amniotic Membrane as a Biological Source for Regenerative Medicine -- 6.Current Understanding Realities of Umbilical Cord Stem Cells Biology and Future Perspectives in Clinical Application -- 7.Characteristics of Mesenchymal Stem Cells Derived from Amniotic Membrane: A Potential Candidate for Stem Cell based Therapy -- 8.Amniotic Fluid: A Source of stem cells for therapeutic use and modeling of Human Genetic Diseases -- 9.cGMP-Compliant Perinatal Stem Cells -- 10.cGMP facility for clinical grade cell manufacturing: a brief review of requirements and design considerations -- 11.Ethical Issues in Perinatal Tissue Derivation and Regenerative Medicine. |

This book covers several aspects of perinatal tissue-derived stem cells, from theoretical concepts to clinical applications. Topics include functions and different sources, immunomodulatory properties, translational point of view, GMP facility design and manufacturing for clinical translation, therapeutic potentials, and finally ethical considerations. The text provides a brief review of each type of perinatal stem cells and then focuses on their multi- or pluripotent properties, regenerative capacity, and future therapeutic potential in regenerative medicine. Additionally, the book discusses GMP compliance in stem cell facilities and the manufacture of stem cells for clinical translation. The chapters are authored by world-renowned experts in the perinatal stem cell field. Perinatal Tissue-Derived Stem Cells: Alternative Sources of Fetal Stem Cells, part of Springer's Stem Cell Biology and Regenerative Medicine series, is essential reading for basic and clinical scientists, clinicians, and pharmaceutical experts working or conducting research in the fields of stem cell biology, molecular aspects of stem cell research, tissue engineering, regenerative medicine, and cellular therapy.
