

Preface

Nowadays, stem cells have a crucial role in tissue engineering and regenerative medicine. Also, basic researches in this field and its clinical applications are growing rapidly. Therefore, investigators, clinicians, and other relevant professionals have focused on regenerative medicine as a multidisciplinary area of interest.

Because of the unique biological characteristics and therapeutic potentials of perinatal tissue-derived stem cells, they are frequently suggested as an invaluable source for cellular therapy and regenerative medicine. In this volume, we address different types and properties of perinatal stem cells and also ethical considerations of their use in regenerative medicine. Furthermore, a brief review of their multi- or pluripotent and immunomodulatory properties, regenerative capacity, and therapeutic potentials is presented in this work. Additionally, we talk about the cGMP facility design and GMP-compliant manufacturing of perinatal stem cells for clinical translation.

It is my pleasure having the collaboration of prominent contributors in this volume, which could be valuable to both basic and clinical investigators who are interested in regenerative medicine.

I would like to acknowledge **Dr. Kursad Turksen**, Editor in Chief of the *Stem Cell Biology and Regenerative Medicine*, for his advice and support.

I also thank **Aleta Kalkstein**, Senior Editor, Hard Sciences, Cell Biology Stem Cell Research, and **Joseph Quatela**, Production Coordinator, at Springer for their continuous help and kind support to get the volume to the print stage.

Tehran, Iran

Babak Arjmand

Perinatal Tissue-Derived Stem Cells

Alternative Sources of Fetal Stem Cells

Arjmand, B. (Ed.)

2016, XV, 239 p. 28 illus., 23 illus. in color., Hardcover

ISBN: 978-3-319-46408-4

A product of Humana Press