

1. Record Nr.	UNINA9910163029703321
Titolo	Bone and Cartilage Regeneration [[electronic resource] /] / edited by Phuc Van Pham
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-40144-0
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (316 pages) : illustrations
Collana	Stem Cells in Clinical Applications, , 2365-4198
Disciplina	617.4710592
Soggetti	Stem cells Regenerative medicine Tissue engineering Biomedical engineering Orthopedics Stem Cells Regenerative Medicine/Tissue Engineering Biomedical Engineering and Bioengineering Surgical Orthopedics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Preface -- 1. Clinical Applications of Stem Cells for Bone Repair -- 2. Stem Cell Therapy for the Treatment of Cartilage Defects and Osteoarthritis -- 3. Repair and Regeneration of Temporomandibular Joint: The Future of Stem Cell-Based Therapies -- 4. Clinical Application of Stem Cells Including Muscle, Bone and Tendon Pathology -- 5. Stem Cell Therapy for Femoral Head Necrosis: From Preclinical to Clinical Study -- 6. Mesenchymal Stem cells – Are They the Magic Bullet for Skeletal Tissue Regeneration -- 7: Stem Cells for Articular Cartilage Repair and Regeneration -- 8. Mesenchymal Stem Cell Therapy in Rheumatoid Arthritis -- 9. Stem Cells in Bone and Cartilage Tissue Regeneration -- 10. Stem Cells: An Optimistic Cell Source in Tissue Engineering for Bone Regeneration -- 11. Dental-derived Mesenchymal Stem Cells as a Promising Source for Regenerative Medicine -- 12. Bone

Formation in Osteoporosis, In Vitro Mechanical Stimulation as Compared with Biochemical Stimuli -- 13. Tissue Engineering Approaches for Rotator Cuff Repair -- 14. The Role of Bone Marrow Derived Mesenchymal Stem Cells in Sports Injuries -- 15. Stem Cells in Dentistry: Potential Applications and Perspectives in Clinical Research -- Index.

Sommario/riassunto

This invaluable resource discusses clinical applications with effects and side-effects of applications of stem cells in bone and cartilage regeneration. Each chapter is contributed by a pre-eminent scientist in the field and covers such topics as skeletal regeneration by mesenchymal stem cells, clinical improvement of mesenchymal stem cell injection in injured cartilage and osteoarthritis, Good manufacturing practice (GMP), minimal criteria of stem cells for clinical applications, future directions of the discussed therapies and much more. Bone & Cartilage Regeneration and the other books in the Stem Cells in Clinical Applications series will be invaluable to scientists, researchers, advanced students and clinicians working in stem cells, regenerative medicine or tissue engineering.
