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## Research Advances in Bone and Cartilage Tissue Engineering

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Deadline for manuscript submissions:

**closed (30 April 2024)**

### **Message from the Guest Editors**

Bone and cartilage are important organ/tissues that are responsible for human body movement. Fracture non-union or segmental bone defects are clinical challenges for orthopedic surgeons. Osteoporosis greatly increases the risk of fractures in the older population. Bone healing disorders significantly affect patients' quality of life and can even cause disability. Articular cartilage that covers the joint surfaces has limited capacity for self-repair and healing due to the lack of blood vessels. Adult cartilage injuries larger than 5 mm never heal without intervention. Age-related or post-traumatic arthritis affected 32.5 million USA adults and estimated 654.1 million individuals (40 years and older) with knee OA in 2020 worldwide. Currently, joint replacement remains the ultimate cure. Researchers in the past two decades have made significant advances using stem cells, gene therapy, and sustained release of biomaterials for the delivery of growth factors for bone and cartilage regeneration, but few have translated these achievements into new clinical therapies for treating patients and curing these diseases.



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**Special** Issue



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## Message from the Editor-in-Chief

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