

Special Issue

Orthopedic Disease Treatment and Management: Innovations, Challenges, and Future Directions

Message from the Guest Editor

Orthopedic diseases represent a diverse and complex challenge in modern medicine, encompassing conditions ranging from degenerative joint diseases to complex musculoskeletal trauma and orthopedic infections. Recent advancements in biomaterials, surgical techniques, regenerative medicine, and personalized treatment strategies have revolutionized patient outcomes, and yet many clinical dilemmas persist. The integration of cutting-edge technologies, including artificial intelligence, 3D printing, and patient-specific implants, is reshaping this field, allowing for more precise, efficient, and durable orthopedic interventions. This Special Issue will showcase pioneering research and clinical studies addressing both surgical and non-surgical approaches in orthopedic disease management. Topics of interest include minimally invasive and robotic-assisted surgeries, biomechanics-driven implant design, the role of biologics in musculoskeletal repair, and emerging strategies in infection control and osteoarticular reconstruction. Additionally, the impact of rehabilitation protocols, multidisciplinary collaborations, and perioperative optimization on functional recovery will be explored.

Guest Editor

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