



Preface

Expanding our Knowledge of Orthobiologic Therapies



Michael Khadavi, MD, RMSK Luga Podesta, MD, FAAPMR
Editors

We are extremely excited to present the current issue of *Physical Medicine and Rehabilitation Clinics of North America*, “Regenerative Medicine Update.” We have put together an all-star lineup of authors who are some of the world’s authorities in the basic science of orthobiologics, cell-based therapies, and the application of these therapies as a first-line treatment, or in combination with surgical procedures to enhance surgical outcomes.

Since the inception of using cell-based therapies to stimulate and enhance the body’s innate ability to heal, tremendous effort has been made to understand how the body heals and how we can safely and effectively enhance this healing process. Millions of dollars and countless hours have been spent over the past decade to increase this knowledge base and provide evidence-based, minimally invasive, treatment modalities that are safe and effective. Despite the exponential growth of the field and increasing number of clinicians implementing orthobiologic therapies in their practices, we still lack standardization in reporting exactly what we are utilizing, how it was collected, how it was produced, what was the deliverable cellular content, how and where it was administered, and finally, delineating specific rationales pertinent to the initiation and progression of tissue-specific pretreatment and posttreatment rehabilitation.

Therefore, in this publication, we have set out to bring together several of the world’s thought-leaders and clinicians in physical medicine and rehabilitation, regenerative medicine, interventional orthopedics, orthopedic surgery, and physical therapy to provide our readers with an update on how these treatment modalities can safely and effectively be applied to our patients for a variety of commonly encountered musculoskeletal conditions within the current restraints recently applied by the FDA.

We are extremely grateful to our contributors, who have invested a great deal of time and effort in researching and writing the most up-to-date evidence-based articles.

Unfortunately, during the preparation of this issue of *Physical Medicine and Rehabilitation Clinics of North America*, we were extremely saddened by the passing of one of our esteemed authors and contributors, Dr Gerald Malangal, on May 14, 2022, at the age of 61. Dr Malangal had an infectious personality. He was also a fierce advocate for what he believed in, research-based, data-driven, evidence-based medicine, minimally invasive orthobiologic treatments, and clinical practices. He was a mentor to many, an accomplished educator, a thought-leader, a brilliant researcher, a collaborator, and a clinician who will be sincerely missed by all that he touched. Our sincere condolences go out to his family, as well as the many colleagues, students, residents, fellows, and patients that were privileged to know him.

We hope that our readers will find this issue of *Physical Medicine and Rehabilitation Clinics of North America* a useful source of information on this ever-changing subject, regenerative medicine.

Personally, we would like to thank our wives, children, and families, for supporting and putting up with us over the past year while we were completing this regenerative medicine update. We would also like to thank Daniel Podesta for his expert assistance with the graphic design and layout of several articles.

Michael Khadavi, MD, RMSK
Kansas City Orthopedic Alliance
10777 Nall Ave, Suite 300
Overland Park, KS 66211, USA

Luga Podesta, MD, FAAPMR
Director Regenerative Sports Medicine
Bluetail Medical Group
Podesta Orthopedic & Sports Medicine Institute
Clinical Assistant Professor
Orlando College of Osteopathic Medicine
1875 Veterans Park Drive, Suite 2201
Naples, FL 34109, USA

E-mail addresses:
mjkhadavi@gmail.com (M. Khadavi)
lugamd13@gmail.com (L. Podesta)