



Rising of New Signatures in Skeletal Muscle Pathologies and Their Possible Role in Disease Pathogenesis

Guest Editor:

Dr. Andrea Farini

1. Stem Cell Laboratory,
Department of Pathophysiology
and Transplantation, Università
degli Studi di Milano, Milan, Italy
2. Unit of Neurology, Fondazione
IRCCS Cà Granda Ospedale
Maggiore Policlinico, Centro Dino
Ferrari, 20122 Milan, Italy

Deadline for manuscript
submissions:

20 August 2024

Message from the Guest Editor

Growing evidence demonstrates the crosstalk between the immune system and the skeletal muscle in muscular dystrophies (MDs), as well as during normal muscle regeneration. Immune cell infiltration into skeletal muscle is a notable feature of the disease pathophysiology but a multitude of secondary defects exist involving metabolic and inflammatory pathways, whose leading players are yet to be elucidated. Steroids are the only effective therapy to delay the onset and control symptoms.

As preliminary evidence has revealed the unique features of T cell profiling in MDs, the immuno-characterization of circulating cells and a molecular analysis of their transcriptome and secretome would allow us to identify a subpopulation of cells to be used as disease biomarkers and to decipher new pathological pathways and reveal therapeutic targets.

The development and normal homeostasis of both innate and adaptive immune systems have been strictly associated with gut microorganisms, the so-called microbiota. Although numerous genes were unsuccessfully studied as MD clinical targets, dark genes should provide us with novel, unexplored therapeutic information.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI