

Special Issue

Application of Biomarkers in Spinal Muscular Atrophy (SMA)

Message from the Guest Editor

Spinal muscular atrophy (SMA) is a rare, autosomal recessive, motor neuron neurodegenerative disease presenting wide phenotypic variability. SMA therapeutic landscape has been dramatically transformed with the introduction of three (nusinersen, onasemnogene abeparvovec, and risdiplam) disease-modifying therapies (DMTs) that increase the level of survival motor neuron (SMN) protein in the last decade. The identification and validation of biomarkers in SMA require sophisticated molecular techniques, including genomic sequencing, proteomics, and bioinformatics. Understanding the molecular pathways affected by SMA could lead to the discovery of new biomarkers. For example, research into the roles of neurotrophic factors, RNA splicing, and autophagy in SMA pathogenesis may uncover novel targets for therapy. This Special Issue will gather available evidence on the application of biomarkers in SMA. We invite researchers who are studying closely related disciplines to contribute original articles, reviews, and communications.

Guest Editor

Dr. Maria Gavriilaki

1st Department of Neurology, AHEPA University Hospital, School of Medicine, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

Deadline for manuscript submissions

closed (20 October 2025)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/206859

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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.

Editor-in-Chief

Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)