



an Open Access Journal by MDPI

Transcriptional Therapy and Nucleic Acid-Based Therapeutics: From Molecular Targets to Preclinical Studies 2.0

Guest Editor:

Dr. Vincenza Barresi

Department of Biomedical and Biotechnological Sciences, Section of Medical Biochemistry, University of Catania, 95123 Catania, Italy

Deadline for manuscript submissions: closed (20 May 2024)



Dear Colleagues,

The exponential growth of genomic information has become crucial to develop new treatments based on molecular tools able to transcriptionally or posttranscriptionally modify the expression of coding and noncoding RNA. To date, antisense oligonucleotides, apatmers and RNA interference, and CRISPR/Cas9 systems are the most common tools used for transcriptional therapy, and some of these tools have been approved by regulatory authorities for the therapy of diseases such as age-related macular degeneration, Duchenne muscular dystrophy, and spinal muscular atrophy. These approaches are exciting and advantageous for both monogenic and polygenic diseases. In the latter case, autoimmune and inflammatory diseases, neurological diseases, cancer, metabolic syndrome, and obesity represent the areas in which transcriptional therapy nucleic acid-based and therapeutics are continuing to expand.

This Special Issue will gather papers reporting on investigations focused on concepts, interpretations, and experiments concerning nucleic acid-based therapeutics, ranging from the identification of molecular targets to their application in preclinical studies.

Specialsue



mdpi.com/si/163544





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