

Special Issue

New Insights in Gene and Cell Therapy

Message from the Guest Editor

Advanced therapy medicinal products (ATMPs) represent a major class of innovative therapies, differing substantially from classic therapeutic agents. ATMPs include gene therapy medicinal products (GTMPs), somatic cell therapy medicinal products (sCTMPs), tissue-engineered products (TEPs), and combined ATMPs. In addition, the complexity of these therapies is substantially higher than that of classical pharmaceutical approaches and results in a significant number of hurdles that limit widespread applications. Pharmacodynamic evaluation in adequate preclinical models should provide robust evidence for potential clinical efficacy. Safety evaluation comprises immunogenicity and immunotoxicity studies, analysis of non-immune toxicity, determination of genotoxicity, biodistribution analysis, expression targeting, etc. This Special Issue is dedicated to all dimensions of preclinical research evaluating gene and cell therapy strategies, potentially leading to ATMPs.

Guest Editor

Prof. Dr. Bart De Geest

Center for Molecular and Vascular Biology, Department of Cardiovascular Sciences, Katholieke Universiteit Leuven, Campus Gasthuisberg, Herestraat 49 bus 911, 3000 Leuven, Belgium

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Biomedicines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

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Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA

2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

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