

Special Issue

Non-viral Gene Delivery: Hurdles and Promises

Message from the Guest Editor

Gene-based medicines are part of the expanding new treatment options with already twenty marketed gene therapy and cell-based gene therapy products and over two thousand gene therapy clinical trials reported worldwide. While viral vectors proved to be efficient in delivering genes, non-viral gene delivery systems are considered with much interest to overcome some of the limitation encountered with viral vectors. Non-viral vectors are usually not immunogenic, have a better safety profile, a larger cargo capacity, and are more easily produced at large scale. However, the ability for nucleic acids to efficiently transduce cells is usually not effective unless complexed with other chemical molecules or physical methods applied to force its cellular entry and nuclear import. This Special issue aims at providing the reader with most up-to-date knowledge on mechanisms involved in intracellular delivery of nucleic acid, the barriers to be overcome, and on recently developed non-viral gene delivery systems. Preclinical in vitro and in vivo proof-of-concept studies, nonclinical regulatory development studies, clinical trials and review articles as well are all welcome for consideration.

Guest Editor

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Eyevensys

Deadline for manuscript submissions

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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.

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