Special Issue

Gene and Cell-Based Cancer Therapies

Message from the Guest Editors

Gene therapy has come a long way, In contrast, cancer gene therapy is in the works with modest success, which is primarily due to heterogeneity in the disease process. Gene therapy can be a game changer for the treatment of cancers, mainly childhood cancers in offering long-term cures. CAR-T cell therapy, which was recently approved for human use for certain blood cancers, is an extension of gene therapy involving genetic modification of patient's T-cells ex vivo to efficiently recognize and kill cancer cells when given back to the patient. There is room for improvement, and the race is on to extend its scope to solid tumors. The topics of interest for our Special Issue include but are not limited to:

- Technological advancements in vector design for cancer gene therapy
- Application of gene and cell therapy in different cancer types
- Use of gene editing technologies in cancer treatments
- Induced pluripotent stem-cell-based cancer therapies
- Tumor-specific gene targeting methods
- Immunomodulation in cancer treatments
- Cancer cell reprogramming by gene transfer

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Deadline for manuscript submissions

closed (30 September 2022)



International Journal of Molecular Sciences

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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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