Special Issue

Opportunities and Prospects of Cancer Gene Therapy

Message from the Guest Editor

Gene therapy has emerged as a promising and innovative approach in cancer treatment, offering targeted interventions by introducing therapeutic genes into cancer cells or tissues to induce cell death or inhibit tumor progression.

This Special Issue will bring together both original studies and reviews covering novel aspects of gene therapy for cancer. We specifically invite articles focusing on different strategies in cancer gene therapy in the following areas:

Understanding biological and genetic processes involved in gene-based cancer therapies, e.g., gene regulation, signaling pathways, tumor microenvironment interactions, and mechanisms of resistance;

Development and improvement of delivery platforms—both viral (e.g., adenovirus, lentivirus, AAV) and non-viral (e.g., nanoparticles, liposomes, exosomes);

Combination with other treatment modalities such as chemotherapy, radiotherapy, immunotherapy, and targeted therapies;

Translational applications in preclinical models, earlyphase clinical trials, regulatory considerations, and case studies.

Guest Editor

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Deadline for manuscript submissions

25 October 2025

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About the Journal

Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the Genes team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider Genes for your next genetics paper?

Editor-in-Chief

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