Special Issue

Chemical and Synthetic Biology Approaches in Cancer Immunotherapy

Message from the Guest Editors

Cancer immunotherapy is a promising and effective treatment strategy for different types of cancer in clinic. It is a broad concept that includes therapies based on antibodies, chimeric antigen receptor T cells, natural killer cells, bacteria, viruses, etc. Thus, interdisciplinary methods, such as chemical and synthetic biology approaches, facilitate the development of immunooncology. Recent chemical and synthetic biology advances have provided great opportunities for basic and translational studies of novel cancer immunotherapies, including the development of proteolysis targeting chimeric technology, molecular glues, etc., for mechanistic research, and the engineering of gene circuits in therapeutic cells. This Special Issue aims to provide a broad survey of the most recent advances in the methodology development and applications of chemical and synthetic biology approaches in cancer immunotherapy. Original research articles or reviews focused on basic or translational studies that discuss new chemical probes, drug leads. cancer vaccines, methodologies, and synthetic biology systems for immuno-oncology are welcome.

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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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