



CAR T Cells in Solid Tumors: Current State and Future Direction

Guest Editors:

Prof. Dr. Arjan Griffioen

Angiogenesis Laboratory,
Department of Medical Oncology,
Amsterdam UMC, Cancer Center
Amsterdam, 1081 HV Amsterdam,
The Netherlands

Dr. Melita Irving

Department of oncology UNIL
CHUV, Ludwig Institute for
Cancer Research Lausanne,
Switzerland

Prof. George Coukos

Department of oncology UNIL
CHUV, Ludwig Institute for
Cancer Research and Lausanne
University Teaching Hospital
(CHUV), Lausanne, Switzerland

Deadline for manuscript
submissions:
closed (1 October 2021)

Message from the Guest Editors

Dear Colleagues,

CAR T-cell therapy has achieved unprecedented clinical responses against certain advanced and treatment refractory B lymphocyte malignancies, leading to first regulatory approval of CD19-directed CAR-T cells in 2018. Non-hematological solid tumors, however, have proven less responsive to CAR T-cells, and cross-reactivity against healthy tissues is an important safety issue. Limited homing, along with barriers imposed by the stroma, can restrict the number of CAR-T cells reaching the solid tumor bed. Moreover, a range of obstacles, including limited oxygen and nutrients, as well as the presence of suppressive immune infiltrate, can lead to CAR-T cell anergy or exhaustion. This Special Issue aims to provide the current status of CAR T cells in the treatment of solid tumors, as well cutting-edge cell culture, CAR-design, gene-engineering, and combinatorial approaches for overcoming challenges in the field.

Prof. Dr. Arjan Griffioen

Dr. Melita Irving

Prof. George Coukos

Guest Editors





cancers



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Samuel C. Mok

Department of Gynecologic
Oncology and Reproductive
Medicine, The University of Texas
MD Anderson Cancer Center,
Houston, TX 77030, USA

Message from the Editor-in-Chief

Cancers is an international online journal addressing both clinical and basic science issues related to cancer research. The journal is publishing in Open Access format, which will certainly evolve to ensure that the journal takes full advantage of the rapidly changing world of information and knowledge dissemination. It publishes high-quality clinical, translational, and basic science research on cancer prevention, initiation, progression, and treatment, as well as other related topics, particularly to capture the most seminal studies in the rapidly growing area of immunology, immunotherapy, and tumor microenvironment.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Oncology*) / CiteScore - Q1 (*Oncology*)

Contact Us

Cancers Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/cancers
cancers@mdpi.com
X@Cancers_MDPI